SHORT-TERM CONSULTANCY

TB DOTS PROVIDER CERTIFICATION PROGRAM TUBERCULOSIS INITIATIVES FOR THE PRIVATE SECTOR

FINAL REPORT

DR DENIS A SMITH (TEAM LEADER)
DR JOSE M ACUIN
MR JIMMY PEREZ
MR MARTIN ASANZA

25 AUGUST 2003

A PROJECT SUPPORTED BY USAID

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EXECUTIVE SUMMARY INCLUDING KEY FINDINGS AND RECOMMENDATIONS

The Philippine Tuberculosis Initiatives for the Private Sector (PhilTIPS) is a three-year project funded by the United States Agency for International Development (USAID) that aims to contribute to the reduction of the prevalence of tuberculosis (TB) in the Philippines. A specific project goal is to improve the quality of TB services by focusing on standardized use of the World Health Organization endorsed Directly Observed Treatment - Short course (DOTS) method.

Certification is a well-established methodology used to assess and improve the quality of health services and the provision of care. The certification of TB DOTS centers using predetermined standards can ensure that service providers have proper abilities and support systems to provide standardized, high quality care to TB patients based on the TB DOTS method.

Certification also assists the regulatory processes needed to ensure that TB DOTS centers provide value for the money the government provides through the PhilHealth TB DOTS Benefit Package.

A certifying organization is required to assess DOTS centers against standards. The purpose of this consultancy is to review the feasibility of establishing an independent certification organization for TB DOTS center certification and make recommendations for its establishment. Implicit in the request is the need to ensure the certification organization provides an effective and operationally efficient model of certification.

The Consultants needed to make a number of assumptions in undertaking this work. Many of these were identified in the Inception Report and others are identified in the body of this report. The Consultants have attempted to explain clearly why the assumptions were necessary and the rationale for selecting the various positions taken in this report.

An evidenced-based, consultative approach was used for this project. With knowledge of the Philippine health care system and international certification programs, the Consultants informed themselves about the needs and aspirations of the key stakeholders. It is upon this foundation that the analyses and recommendations found in this report are based. Also, every effort has been made to ensure that the analyses and recommendations are consistent with the overall strategic directions of the Philippine Department of Health, the Philippine Health Insurance Corporation, PhilTIPS and the Philippine Coalition Against Tuberculosis.

The recommendations to be found in the report are summarized below. The recommendations are based on world best practice and are sensitive to and compliant with Filipino culture and practice.

RECOMMENDATIONS

Principle Recommendations

A review of the regulatory environment in the Philippines reveals that there are other organizations actively engaged in certification and accreditation. These include the *Sentrong Sigla* Movement of the Department of Health, the Philippine Health Insurance Corporation (PhilHealth) accreditation program, the Philippine Council for Accreditation of Health Care Organizations (PCAHO) accreditation program and private ISO certifying agencies. The prospect of redundancy of certification effort and the duplication of existing Department of Health programs has profound implications for the operation of a certification organization. Just as importantly, the costs of setting up and operating a certification organization according to the organizational, administrative and human resource requirements outlined in this report

raise serious concerns about the efficacy of establishing an independent certification organization for TB DOTS center certification. Accordingly the Consultants make the following principle recommendations:

- An independent certification organization should not be established.
- A two-stage approach for the certification of private TB DOTS Centers should be considered. PhilCAT should continue to survey the first small group of TB DOTS centers using the key recommendations in this report to strengthen the process.
- An independent private certification group should be contracted to survey the rest of the targeted total number of private TB DOTS Centers.
- PhilCAT should continue to focus on its six core goals.
- PhilCAT should remain accountable for the certification program and continue to own the certification standards. This would require PhilCAT to regularly review and update of the standards.

Additional Recommendations

The following recommendations are provided to assist improve the processes used by PhilCAT and to give guidance if it is decided to establish an independent certification organization for TB DOTS center certification.

The Governing Body of the Certification Organization

It is recommended that:

- The TB DOTS center certification program be 'owned' by a body of stakeholders representative of the broad issues in TB management and control.
- The certification organization develop:
  - a clear and unambiguous mission statement;
  - core values;
  - organizational goals;
  - a continuous quality improvement process; and
  - guiding ethical principles.
- Criteria for appointment, duties and responsibilities and term of office should be established for the members of governing body.
- The governing body should establish appropriate structures and mechanisms for effective governance and should should regularly review the organizational structure to ensure it supports the organization's activities.

Management Processes of the Certification Organization

It is recommended that:

- The governing body delegates authority to an executive officer and ensures the responsibilities are defined so that the organization is managed effectively.
- The certification organization develop a strategic and operational plans and ensure the plans are reviewed in terms of goals and achievements.

The Certification Organization Staff

It is recommended that:

- All staff be appointed on the basis of clear and unambiguous selection criteria through a transparent and procedurally fair process.
- All staff in the certification organization have a role statement.

The Certification Standards

It is recommended that:

- The certification standards be reviewed and updated in a planned way in consultation with the key stakeholders.

Entry into the Certification Program

It is recommended that:

- The certification organization develops an information pack for prospective TB DOTS centers.
- A service contract be provided.
- A policy on advice should guide the provision of information to applicant TB DOTS centers.

The Certification Surveyors

It is recommended that:

- Certification surveyors be selected through a transparent selection process based selection criteria and they be appointed for fixed terms with renewal based on assessed performance.
- Induction training be based on the ISQua criteria.
- The certification surveyors be contractors paid an honorarium.

The Survey and Certification Decision

It is recommended that:

- The survey team comprises two surveyors and they provide one consolidated consensus report.
- A new rating system should be introduced.
- The certification decision be based on the collective judgement of the decision-making committee with a survey team member being available to provide clarification.
- The decision-making process should be guided by rules to ensure procedural fairness and by guidelines to ensure appropriate and consistent certification decisions.
- A range of certification outcomes should be considered and the duration of subsequent certification should be extended from one year to three years.
- The certification organization establish quality control and quality improvement systems to review and evaluate certification decisions for consistency.
- The certification organization develop a transparent and procedurally fair appeals process.

IMPLEMENTATION OF THE RECOMMENDATIONS

Implementation of the recommendations will be the responsibility of many stakeholders. PhilCAT will need to take the leadership role. The Consultants believe a critical success factor for implementation is the ownership of the recommendations and this will be dependent on how the recommendations are introduced to the many stakeholders. All of the key stakeholders will require adequate time to consider and discuss implementation of the recommendations with their peers. This discussion will serve to inform PhilCAT in developing an implementation strategy.

INTRODUCTION AND BACKGROUND TO THE CONSULTANCY

The Philippine Tuberculosis Initiatives for the Private Sector (TIPS) is a three-year project funded by the United States Agency for International Development (USAID) that aims to contribute to the reduction of the prevalence of tuberculosis (TB) in the Philippines. The project aims to increase accessibility to and the quality of TB services by focusing on improvements and standardization of TB control and management in the private sector using the World Health Organization endorsed Directly Observed Treatment - Short course (DOTS) method.

There is a considerable body of evidence that DOTS is effective in treating TB. However, it is a relatively new approach to treatment and it has not been fully implemented throughout the Philippine health care system.

The Philippine Health Insurance Corporation (PhilHealth) recently introduced the Tuberculosis Outpatient Benefit Package based on the DOTS method. This serves as a major financial incentive for providers to support the DOTS method.

As a purchaser of health care services on behalf of the Filipino community, PhilHealth wants to ensure that it is only purchasing quality care services.

The certification of TB DOTS centers using predetermined standards can ensure that providers have proper abilities and support systems to provide standardized care of a high quality. In order to achieve this, the certification standards must require TB DOTS centers and individual providers to possess the requisite training and skills, to have a suitable physical environment, to have the necessary equipment and supplies and to have effective systems of information and management.

A certifying organization is required to assess TB DOTS centers and providers in a uniform way against the standards. This organization will be required to design and establish a certification program to support the standards. The specific purpose of this consultancy is to develop a plan to assist the establishment of the certifying organization.

The over-arching objective of this consultancy is to improve the quality of care provided to persons with tuberculosis and to minimize the burden of disease on the Republic of the Philippines. The Consultants will work to achieve this objective by recommending international best practice in a manner that is appropriate to the Philippine environment.

OVERVIEW OF PROJECT OBJECTIVES

The Consultants were requested to develop a detailed plan and operating manual that would facilitate the establishment of TB DOTS certifying organizations and enable the organization to implement an effective and efficient certification program. The Consultants were also requested to develop the supporting procedures, forms, flowcharts and templates necessary for the certification organization.

The Inception Report outlined a number of concerns with the Scope of Work and the capacity of the Consultants to provide a detailed plan and manual within the time available. Many of the issues required for a detailed plan and manual remain unresolved. These can only be resolved following deliberation of the many issues raised in this report.
Of significance is whether the initial concept of certification by an autonomous certification organization should proceed.

This report does address the six key areas requested in the Scope of Work:
1. The certification process;
2. Marketing and communications;
3. Organization and staffing;
4. Data and information requirements;
5. Costs and financing; and
6. Quality assurance.

The body of the report and its appendices contains sufficient detail to give clear direction and guidance for the establishment of a certification organization and a certification program for TB DOTS centers. If a decision is made to proceed with the establishment of an autonomous TB DOTS certification organization, some details will have to be added by the certification organization based on the resolution of outstanding issues.

APPROACH TO THE PROJECT

While this consultancy is, on face value, a relatively clear-cut task comprising a number of separate components focussing on establishing a certification organization for TB DOTS centers, it is recognized that this consultancy is one of a number projects focusing on reforms in the management of TB in the Philippines. Consequently, in the analyses and recommendations emanating from the consultancy, every effort has been made to ensure the analyses and recommendations are consistent with work done in other projects related to the National Tuberculosis Control Program.

The Consultants approached the project without preconceived ideas of how the certification organization should be established or operate. With a solid knowledge of the Philippine health care system and international certification programs, the Consultants informed themselves about the needs and aspirations of the key stakeholders for the certification program. It is upon this foundation that the analyses and recommendations were grounded.

For this consultancy, an evidenced-based, consultative approach was used. A range of documents were examined (see Appendix A) and extensive consultations were held with TIPS Field Office staff, appropriate PhilHealth and Department of Health staff, DOTS providers, leaders in tuberculosis medicine (especially members of PhilCAT) and heads of organized medical and health professional groups (see Appendix B). Wherever possible, the evidence or the source of specific opinions is cited in this report.

The Consultants worked closely with the TIPS Field Office staff, the Philippines Coalition Against Tuberculosis (PhilCAT) and appropriate PhilHealth and Department of Health staff to identify key issues and to add maximum value within the project's relatively short contract period.

The Consultants examined the draft standards and operational procedures of the proposed certification program and assessed them in terms of both their impact and international best practice. The assessment has been made in terms of effectiveness, efficiency and sustainability.

Implementation of the recommendations in this report will be the responsibility of others. The Consultants believe a critical success factor for the implementation of any report recommendation is ownership. Key stakeholders must have ownership of the outcomes of the consultancy if they are to be actioned.

Throughout this consultancy, the Consultants were cognizant of the need to ensure that no one individual or group of individuals unduly influenced the direction or outcomes of the consultancy. This required ongoing consultation with several stakeholders. However, as with all short-term consultancies, the limitations of available time did not allow all recommendations in this report to be canvassed with all stakeholders.

THE 'DRIVERS' FOR CERTIFICATION OF TB DOTS CENTERS

QUALITY

Quality of care is increasingly a concern of all societies. Quality health care can be defined in a myriad of ways. For the simplicity of this report, quality health care can be described as the degree to which a health care intervention increases the likelihood of a desired health outcome and the intervention being consistent with current professional knowledge.[1] Consequently, quality health care must be safe, effective, efficient, appropriate, accessible and patient centered.

To achieve high quality health care, provider organizations must address the following critical issues:

- individual and organizational competence;
- continuity of care;
- information management;
- the role of evidence-based medicine; and
- evidence of compliance with standards (certification).

Advances in the technology of health care and the complexity of the organization of health delivery have combined to create their own set of problems in relation to the safety, appropriateness and effectiveness of health care services. These problems can only be addressed with a systems approach.[2]

There must be a genuine commitment to incorporating quality into everyday practice at all levels of the health care organization. Quality improvement must be accepted as a continuous and ubiquitous process and not something that is only associated with certification. Everyone in the health care organization has to accept responsibility for quality of the service they deliver. Lastly, there is a need to develop a systems perspective of health care and devise appropriate indicators and mechanisms for managing the quality of health care being provided.

These substantive changes will require an organised approach with a systems focus on quality improvement and this approach will be crucially dependent on a framework of standards and criteria for quality care.

GREATER ACCOUNTABILITY

Around the world, governments, and other payers for health services, are taking an increasing interest in the quality of health service provision. This contrasts with the position in the past, when quality was considered to be the sole province of health care professionals. Health care organizations and professionals are being required to demonstrate the quality and safety of clinical processes and develop measures of health outcomes and health status. Today's society is better informed and increasingly aware of the benefits and risks of health care. This has necessarily led to a critical evaluation of clinical practices by health care professionals, the media and the lawyers.

All health care professionals, and especially doctors, have a responsibility to provide high quality, safe care in a cost efficient manner. And because health care professionals have a

[1] Lohr K. Medicare: A Strategy for Quality Assurance, Institute of Medicine. Washington, DC: National Academy Press, 1990.

[2] [2] Kohn L, Corrigan J, Donaldson M, editors, for the Committee on Quality of Health Care in America, Institute of Medicine. To err is human: building a safer health system. Washington: National Academy Press, 2000.

special position within our society performing a critical social function they must accept an inexorable social obligation and responsibility for the quality of the care provided.

Health care professionals and organizations need to pro-actively demonstrate quality outcomes through the implementation of best practice approaches, an achievement of suitable outcome standards and quality assurance processes.

It is not yet clear how governments will operationalize this concern for quality. How quality will be assessed and monitored is still being debated, but it is clear that certification is going to play a major role in many health care systems.

LICENSING, REGULATION, CERTIFICATION AND ACCREDITATION

Certification, originally perceived as a vehicle to ensure quality, is increasingly an agent of government regulation.[3] In some countries, certification has become part of the regulatory process of control by governments and public agencies. This is especially the case where market structures are developing in health care systems and where purchasers are concerned about buying good quality health care services and in raising the standards of care.

However, throughout this consultancy many of the parties interviewed were unable to distinguish the differences between licensing, regulation, certification and accreditation and the role each plays in quality health care. The language and concepts have been used almost interchangeably throughout the Philippines. The role of certifying TB DOTS centers and the link to accreditation by PhilHealth further adds to the confusion in terminology.

For the purposes of this consultancy the distinctions between regulation, certification and accreditation will not be highlighted. As is the general practice in the Philippines, the terms will be used almost interchangeably.

However, as a point for reference and to assist a common understanding for the future, the following definitions developed from material published by the International Society for Quality in Health Care (ISQua)[4] may be useful to draw a distinction between licensing, regulation and accreditation.

- Licensing is an award of social privilege. It grants the licensee a privilege within specified boundaries. The focus of a license is public safety and requires certain minimum standards to be met. Licensing is safety oriented but realistic, role-based and usually extended unless abused. Inspection and testing are the tools of licensing.
- Regulation is a more specific activity than licensing. It is needed to ensure quality. Licensing standards are an essential initial requirement. Regulation aims to create and sustain a particular behavior so as to safeguard the interests of the community. Testing, auditing and certification are the tools of regulation.
- Accreditation is a process that supports self-sustaining, continuous quality improvement. It ensures, maintains and enhances the quality of health services in the best interests of the community. Audits, performance monitoring and surveys are the tools of accreditation.

The goal of certification in tuberculosis management is to ensure the quality of TB care and assure the general public and payers of health care that a TB DOTS center is capable of providing safe and effective DOTS services to TB patients.

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[3] Scrivens E. International trends in accreditation. *Int J Health Plan Mgt* 1995 10(3): 165-81.
[4] International Society for Quality in Health Care (ISQua), Clarendon Terrace, 212 Clarendon Street, East Melbourne, Victoria 3002, Australia. [www.ISQua.organisation.au]

Despite evidence of its effectiveness in treating tuberculosis, DOTS is a relatively new intervention that has not been fully institutionalized and integrated into the health care system of the Philippines. Certification aims to standardize the provision of DOTS by imposing a uniform set of standards and criteria governing the human, material and administrative resources of a TB DOTS center. Compliance with these standards and criteria is an excellent starting point on which the accreditation process of PhilHealth can begin.

CERTIFICATION PROGRAMS

The origins of hospital accreditation date from 1917 when it was first developed in the United States on the initiative of Dr Ernest Codman, founder of the American College of Surgeons, and his surgical colleagues, to assess standards of surgical training programs in hospitals. The Hospital Standardization Program sought to ensure that "those institutions having the highest ideals may have proper recognition before the profession, and that those of inferior equipment and standard should be stimulated to raise the quality of their work".[5]

That program evolved into an organisational accreditation program by the 1950s. Since then accreditation and certification programs building on the American approach have been developed in Canada and Australia and more recently in New Zealand, the United Kingdom, the Philippines, Japan, Korea, Taiwan and in some South American, Scandinavian and European countries.[6]

In the search to improve on the basic model other approaches to external quality assessment have been used by health care organizations to assess and improve services. However, all approaches share some common features:

1. Participating health care organizations are evaluated by a team of trained reviewers at regular intervals against established standards;
2. The standards are based on sound contemporary knowledge and practice;
3. The assessing body grants formal recognition based on the assessed achievement of the standards; and
4. A report of the review findings, including commendations and recommendations, is published and made available to the health care facility. These reports may also be made available to others.

Most accreditation and certification programs are founded on the quality assurance theory best espoused by Donabedian that describes the relationship between structures, processes and outcomes.[7] Put simply, there is an acceptance that if an organization has the right structures and processes in place better outcomes will result.

This approach led to a major focus on standards that required structures (buildings, equipment, organisational relationships, *et cetera*) and processes (committee activities, performance guidelines, *et cetera*). Health care facilities were assessed on the presence or absence of these structures and processes. However, a new and better understanding of quality in the past decade has seen many accreditation and certification programs focus more on outcome-based standards and incorporate principles of continuous quality improvement.[8]

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[5] Scrivens E. International trends in accreditation. *Int J Health Plan Mgt* 1995 10(3): 165-81.
[6] International Society for Quality in Health Care (ISQua), Clarendon Terrace, 212 Clarendon Street, East Melbourne, Victoria 3002, Australia. [www.isqua.org.au].
[7] Donabedian A. The quality of care: how can it be assessed? In Graham N, ed, *Quality Assurance in Hospitals*. Maryland: Aspen Publishers Inc, 1990.
[8] Shin YS. Hospital accreditation - a universal perspective. *World Hosp Health Serv* 1995; 31(1):22-8.

The aim of contemporary accreditation and certification programs is to provide the framework for continuous improvement with a demonstration of the effectiveness of care with evidence of achievements, improvements and outcomes. This new approach is more demanding and requires specific clinical and non-clinical information to support the outcomes orientated program.

Worldwide, accreditation (and to a lesser extent certification) has become the recognizable symbol for the community that the health care facility has been judged by people who understand the nature of health care delivery, and that the facility has met contemporary standards and incorporated the principles of quality into everyday work practice.

THE BENEFITS OF CERTIFICATION PROGRAMS

The benefits of TB DOTS center certification are not easy to identify in a direct sense as the real benefits accrue from the structured approach taken by a TB DOTS center to continuous quality improvement. Certification does, however, provide a comprehensive framework and does provide the means for demonstrating and assessing a TB DOTS center's progress along the quality improvement path.

A summary of benefits attributed to certification is listed below.

Summary of benefits:

1. Certification improves care to individuals
   The standards in certification programs are focused on one goal - improving the quality of care to the highest possible level. The standards include contemporary performance improvement concepts that help health TB DOTS centers continuously focus on and improve the quality of care.

2. Certification strengthens community confidence in the TB DOTS center
   Certification highlights the TB DOTS center's commitment to providing quality care to the community being served. Achieving certification makes a strong statement to the community about the TB DOTS center's efforts to render the highest quality services. Furthermore it tells the community that if something does go wrong, the TB DOTS center has systems in place to detect and minimise the impact of the deviation from good practice.

3. Certification attracts professional referrals
   General practitioners and other health care professionals will frequently use certification as a benchmark of quality when referring patients for tuberculosis care.

4. The certification process is educational
   The survey process should be designed to be educational, not inspectorial or punitive. Surveyors provide professional consultation and staff education and the whole TB DOTS center grows in its understanding of quality improvement and risk management. The certification body also provides educational seminars and publications about performance improvement and other standards-related topics.

5. The certification process facilitates teamwork, aids communication and improves staff morale
   A structured organisational approach to quality improvement brings staff together for a common goal - improved patient care. Formal recognition by an external body for 'a job well done' improves morale.

6. Certification assists regulatory processes
   Certification can lead to accreditation with PhilHealth.

7. Certification is recognised by insurers and other third parties
   Increasingly, certification is becoming a prerequisite for eligibility to receive health insurance reimbursement or differential reimbursement, for bidding on contracts and for participation in managed care plans.

THE ROLE OF CERTIFICATION IN TB DOTS

The National Tuberculosis Control Program has been plagued by manpower and resource inadequacies, fragmented and small-scale activities and minimal involvement of providers and other stakeholders outside of the public health sector. Directly observed short course chemotherapy of TB, while showing evidence of effectiveness, has remained largely untested in a scale wider than research settings among private providers. Viewed as a resource-intensive treatment strategy, DOTS implementation labors under significant resistance from both public health workers who need to manage high patient volumes and deliver all of the DOH flagship programs and from private physicians who would rather spend time supplying services for which they can be paid.

Certification is a public recognition of achievement of a predetermined set of performance standards. By rewarding providers who demonstrate compliance to the requirements of the TB DOTS program with technical assistance and participation in the PhilHealth TB DOTS Benefit Package, certification aims to provide the needed incentives for full-scale DOTS implementation. By ensuring that DOTS is provided within an environment of continuous quality improvement, certification seeks to promote widespread public support for DOTS as the intervention of choice for TB. Thus certification promises to generate public demand for quality TB care and to improve the supply of quality DOTS providers. The certification of TB DOTS Centers constitutes an aggressive strategy towards decisively hastening the control of TB in the Philippines.

RELEVANCE

There are common concerns, at least in Australia, the United States and parts of Europe, about how organisational certification standards are defined and measured, and how effectively the existing systems support internal quality improvement at the same time as providing public accountability and information. Along with these concerns are arguments for consistency of standards and their assessment within nations and within trading regions. As in other parts of the world, at some time in the future there may be pressure for South East Asian countries to adopt common core standards and assessment processes to achieve consistency and compatibility at national and international level.

All certification programs must be relevant to the health care organizations they survey. Cost pressures and ever-increasing demands on health care facilities and personnel have resulted in two distinct tensions for certification organizations.

The first is the drive to reduce the number of standards used to describe good quality care. As a consequence, the focus of certification standards in many parts of the world has moved away from assessing what the health care organisation could provide in theory to what it has provided in terms of individual patient care. As a result, certification programs are developing performance indicators that better demonstrate how well a health care organisation is performing.

The second is the drive to reduce the number of certification and similar processes a health care facility must undergo. Increasingly, various health programs are establishing certification and accreditation systems. Consequently, a health care facility may be subjected to licensing inspections by various authorities, to certification surveys for each of its clinical programs and to a survey of performance by an accreditation organization. Many of these inspections, audits and surveys require the same information, visit the same areas, test the same performance criteria and engage the same personnel for ever-increasing amounts of time. Given the finite resources available for health care, the benefit of these multitudinous inspections, audits and surveys must be questioned. At the very least, opportunities for amalgamating the activities must be considered.

SCALE OF THE CERTIFICATION PROGRAM

THE SIZE OF THE TUBERCULOSIS PROBLEM

In 2000, the World Health Organization (WHO) estimated that there were 249,655 new cases of TB in the Philippines. Some believe these figures are significantly under estimated.[9] More than 60,000 Filipinos die from the disease each year. Death from TB continues to rise because of the high incidence of TB infection among Filipinos and the rapid population growth rate.

While TB is readily treatable, this is not the case for most Filipinos. Only half of symptomatic patients obtain any care at all and most of them self-medicate (26.2%). Private health services constitute the dominant service provider network in the Philippines, yet is a limited source of formal care for TB (9.6% overall).[10] The majority of DOTS is provided by the public sector through the more than 1800 Rural Health Units and Local Health Centers spread throughout the Philippines.

The Philippine Tuberculosis Initiative for Private Sector (TIPS) Project was developed to establish a strong public-private collaboration in TB management. Of particular interest is the expanded use of DOTS by private providers to treat TB and to limit its spread to those that currently do not receive care from either public or private providers.

THE NUMBER OF TB DOTS CENTERS

There are approximately 1800 Rural Health Units and Local Health Centers spread throughout the Philippines. Each is a potential TB DOTS center. There are currently 5 recognized private TB DOTS centers and there is a goal to expand this to 150 sites spread throughout the country over the next five years.

The Consultants have been advised that the average number of new cases managed per TB DOTS center is 100 per year. It is accepted that up to half of the patients with TB do not present for formal care. Even taking this into account, a simple estimate would suggest that there would need to be more than 2500 TB DOTS centers to manage this burden of new cases based on average new cases seen per center.

The growth of private TB DOTS centers cannot be estimated but clearly there is a pressing need to rapidly expand the base of private TB DOTS centers to augment the public sector. The Consultants have relied on the PhilTIPS target of 150 in five years.

[9] PhilCAT, 2003
[10] 1997 National Tuberculosis Prevalence Survey

The Size of the Certification Organization

For the purposes of this consultancy, a number of assumptions are made about the number of TB DOTS centers to be certified. An initial assumption is that all TB DOTS centers would eventually be certified. This assumption is premised on the desire (the need) to ensure optimal care to all TB patients. Given the very large number of potential TB DOTS centers, it must also be assumed that only a proportion of those could be certified in a five-year period.

The number of TB DOTS centers to be certified has a major impact on the size of the certification organization and its staffing. This in turn impacts the cost and efficiency of running the program, the management structures required for the organization and the ability of the certification organization to advocate on behalf of quality TB DOTS.

It is implied in the Scope of Work that a number of certification organizations be established to provide certification for TB DOTS centers. The Consultants believe this has the potential to undermine the consistency of application of the standards and criteria in the initial phases of the certification program and is not recommended. Of course, it must also be recognized that there is a minimum operational size at which a certification organization can provide an affordable certification service.

Scope of the Certification Program

TB DOTS Centers

The main focus of the certification program discussed in this report is the TB DOTS center. This will consist of an identifiable space for the provision of clinical services and DOTS to TB patients. It will be managed and staffed by health care personnel with training in the identification and management of TB patients and in the administration of the TB DOTS program. It will also provide sputum microscopy and anti-tuberculous drugs. Several institutional models are currently being tested for feasibility and replicability. These include stand-alone ambulatory centers, centers that are based in existing ambulatory clinics, teaching medical centers, schools, work places (such as factories), NGO facilities and church organizations.

The main goal of the certification program is the assurance of quality DOTS service provision through clear demonstration of continuous performance improvement. The certification standards assume that structural inputs to the DOTS centers are critical but only the springboard for putting into place processes of care that achieve clinically important health and organizational outcomes.

Other professional providers, Health Facilities and Services

The program also has to be able to look beyond the actual TB DOTS center because TB DOTS centers can form partnerships with other health facilities for the purpose of subcontracting laboratory or pharmacy services. Obviously, the quality of the human and technical resources of subcontractors must also fall into the remit of a TB DOTS center certification program. Furthermore, physicians who currently refer, or who will refer, TB patients to the TB DOTS centers have to be considered as future targets for certification. Consistent with the over-arching goal of improving the quality of TB care to reduce the general prevalence of TB, these professionals should be encouraged to configure their clinical services to adhere with the National Tuberculosis Control Program guidelines. The certification program can be positioned as a stimulus and a magnet for aligning primary health care practice with the goals of the National Tuberculosis Control Program.

THE CERTIFICATION STANDARDS

As a guiding principle, the certification standards should meet international best-practice and be developed, implemented, reviewed and updated in a planned way in consultation with the key stakeholders.

STANDARDS DEVELOPMENT PLAN

PhilCAT, with the assistance of a consultant, developed a set of standards and criteria for the certification of TB DOTS centers. The Consultants believe these standards and criteria are appropriate for the initial process of certification. However, they must be regularly reviewed as practice and understanding of TB management changes. These reviews and revisions must be completed in a planned and systematic way.

Any intention to review and revise the standards must be communicated to the key stakeholders and be based on a clear and systematic approach. A standards development plan should define:

- the principles underpinning the standards and criteria;
- the relationships with other standards and guidelines; and
- the need for future standards and guidelines.

As with any good plan, standards development plan should define the outcomes, priorities, resources and timeframes. Where appropriate and practicable, the standards development activities should be coordinated with other standards development activities undertaken by other professional and regulatory bodies (e.g., the Department of Health *Sentrong Sigla*).

BEST-PRACTICE PRINCIPLES FOR STANDARDS

There are a number of guiding principles that should be considered in any review and revision of the standards and criteria.

1. Customer focus

The standards and criteria must have a clear requirement for patient involvement in care and express a concern for patient rights. Quality health care requires a customer focus. Paramount in any revision should be a concern for safety of all care processes from a patient's perspective.

2. Type of Standard

The type of standards should be clearly defined. Standards can be classified as being primarily structure, process or outcome.

3. Scope of Standard

The scope of the standards should be clearly defined. The intent should be coverage and improvement of health care within a whole organisation, be it a single facility (e.g., a TB DOTS center), network, regional service or a health care plan.

4. The Content of the Standards

The content of the standards should be comprehensive and clearly structured. In many cases standards can be basic structural standards, departmental or functional standards or patient care process standards. The content of the standards and criteria for TB DOTS centers should be focused on the care process, the management of the service, the human resources required; the information needed to manage care and the information systems, safe practice and the environment of care and on continuous quality improvement.

5. Measurement

The standards and criteria must be amenable to measurement. An outcome focus will facilitate measurement. This can be further supported by development of performance indicators.

6. Evidence Based Standards

Standards and criteria must be up-to-date and based on sound information and practice. Standards must be regularly reviewed and revised to ensure they do reflect contemporary practice and understanding.

STANDARDS DEVELOPMENT

The complete range of stakeholder interests must be represented in the standards review and development through:

- membership of working groups plus written or oral consultation;
- field reviews; and
- participation in pilot testing of the standards.

The views of all stakeholders, inclusive of patient groups, must be obtained to identify areas and priorities for potential improvement of the standards and criteria. Once the new standards and criteria have been drafted, they should be tested by appropriate stakeholders prior to approval and implementation. The stakeholders should consider:

- clarity of intent
- practicality of implementation
- impact on service delivery
- resource and other implications
- ability to survey and assess in practice.

INTRODUCTION OF NEW STANDARDS AND CRITERIA

The certification organization must formally approve the new and revised standards in light of feedback from the various stakeholders. This must be done to give authority to the new standards and criteria.

Full information must then be provided to surveyors and the TB DOTS centers to assist the interpretation, application and implementation of new and revised standards. Educational programs must also be organized where specific issues are identified.

All revisions must be made available with an adequate lead-time for implementation. Parameters and timeframes and any transitional arrangements must be clearly identified. Advice from the certification organization should be available if required.

EVALUATION

As a quality organization, the certification organization must constantly evaluate its own processes and outcomes. The certification organization must proactively seek the views of the TB DOTS centers, surveyors and stakeholder groups on the standards and criteria. The feedback must be documented and monitored. The certification organization should regularly collect views on:

- TB DOTS centers and surveyor inquiries about standards;
- problems that have arisen on surveys or in education activities;
- comments from stakeholder groups; and
- changes in the external environment, including the management and control of TB.

The data must be analyzed and evaluated to assist with the improvement of the standards and criteria. The standards should be revised on a regular basis.

Recommendation 1. The certification standards should be reviewed and updated in a planned way in consultation with the key stakeholders.

THE CERTIFICATION ORGANIZATION

The following sections of the report provide an analysis of issues and a number of recommendations for the establishment of an autonomous certification organization for TB DOTS center certification.

OWNERSHIP OF THE CERTIFICATION PROGRAM

In many countries of the world, the accreditation and certification programs are managed by independent agencies that define and monitor standards of quality. Independence avoids the often-heard criticism that purchaser (governments and insurers) and provider organisations (hospital groups and doctor groups) are not well placed to examine care processes and outcomes in an unbiased way. To establish an independent program takes significant time, resources and the support of all significant stakeholders. The legal standing and financial sustainability are critical success factors for an independent certification program.

The key stakeholders for TB DOTS center certification in the Philippines are PhilCAT and PhilHealth. PhilCAT is the pre-eminent organization in the Philippines promoting a range of strategies to control tuberculosis. It is an association of the principal stakeholders in TB management. PhilHealth is the national health insurance provider.

PhilHealth began implementation of the TB DOTS Outpatient Benefit Package in selected private TB DOTS Centers at the last quarter of 2002. Expansion of the program to other DOTS centers started in the middle of 2003. The Benefit Package covers the provision of diagnostic work-up, consultation services and anti-TB drugs as recommended by the TB clinical practice guidelines of the National Tuberculosis Control Program. Only new cases of pulmonary and extrapulmonary tuberculosis in qualified members and dependents of the National Health Insurance Program will be covered. The recipients of the Benefit Package will be outpatient TB DOTS Centers accredited by PhilHealth based on the quality assurance standards contained in the PhilHealth Benchbook.[11]

In a Memorandum of Agreement (MoA) signed in the first quarter of 2003, PhilHealth agreed to require PhilCAT certification of capability as a requisite for granting PhilHealth accreditation. As part of the MoA, PhilHealth would provide PhilCAT with technical and financial support as well as provider monitoring information. In turn, PhilCAT would develop a formal certification program for TB DOTS centers based on the PhilHealth quality standards, conduct training, manage a national TB Registry and charge a reasonable amount to TB DOTS Centers to cover certification costs.[12] It can be clearly argued that this MoA forms a legal basis for PhilCAT ownership of the certification program.

The Department of Health is also an important stakeholder because of the National Tuberculosis Control Program. This is the Department's nationwide flagship program for TB control and management. Through this program the Department provides central guidance and technical assistance to all its Regional Offices (the Centers for Health and Development),

[11] The PhilHealth TB-DOTS Benefit Package Manual of Operations, 2002.
[12] Memorandum of Agreement between Philippine Health Insurance Corporation and Philippine Coalition Against TB. February 14, 2003.

DOH-retained hospitals, provincial, municipal and city hospitals, health centers and rural health units.

Another initiative of the Department of Health, in conjunction with the Local Government Units, is the *Sentrong Sigla Movement*. This program, aimed at promoting the availability of quality health services in health centers and hospitals through a certification and recognition program, has developed and promoted structure, process and outcome quality standards for health care facilities.[13] These standards require the provision of TB services that comply with the National Tuberculosis Control Program guidelines, that is, DOTS-based. There are already some 533 *Sentrong Sigla*-certified hospitals and local health centers in all regions of the country. Although the PhilCAT – PhilHealth certification program targets the private health facilities, it is widely recognized that sustainability can only be achieved through private-public partnerships in DOTS provision. Thus 'buy in' by the Department of Health is critical to the success of any TB DOTS center certification program.

As stated above, an independent certification organization must represent the interests of all stakeholders involved in TB care. PhilCAT is a stakeholder organization, however, the majority of stakeholders represented on PhilCAT are doctors. Doctors are the most influential group within the health sector so their engagement is a critical success factor. However, other groups need to have 'ownership' of the certification program if it is to be an effective instrument for quality improvement.

Nurses and midwives constitute the largest two employment categories working in Local Health Centers and Rural Health Units. They are largely responsible for continuity of care. Because of the nature of the DOTS methodology and the operation of TB DOTS centers, most of the certification standards and criteria directly impact upon the nurses and midwives and their practices. Care should be taken to ensure a balance of views. This is particularly so in the Filipino society because doctors' views tend to dominate the views of other health workers and non-professionals.

It must also be remembered that the whole purpose of health care is to provide for the needs of patients. The purpose of certification of TB DOTS centers is to improve the provision of TB care for patients. With the aim of ensuring patient orientation, patients, as a group, should be represented on the governing body of the certification organization.

However, the consumer movement in TB care is not yet well established in the Philippines. Without this organisation pre-existing, there are difficulties in getting the consensus view of patients represented within any certification organization.

Recommendation 2. The TB DOTS center certification program should be 'owned' by a body of stakeholders representative of the broad issues in TB management and control.

EFFECTIVE GOVERNANCE OF THE CERTIFICATION ORGANIZATION

An organization whose *raison d'être* is improving the quality of health services must lead by example. The certification organization must be an organization committed to its own quality processes and outcommes. This requires strong leadership and management. It requires formal management structures, designated officers and explicit membership rules.

The leaders of the organization will determine whether the certification organization excels or not. The governing body and the senior managers will significantly influence the culture of the

[13] Department of Health. Primer. Sentrong Sigla Movement. [http://www.doh.gov.ph]

organization.[14] The values and goals they establish for the certification organization provide direction for staff and organizational behaviour. They create the environment whereby staff and certification surveyors work together to achieve a common objective. The leaders shape performance within the organization by empowering staff and surveyors, motivating them to excel and emphasizing continuous improvement.

The leaders of the certification organization have a prime responsibility for ensuring an appropriate infrastructure is established to support the organization in providing a quality certification service.

GOVERNING BODY

The Mission and Goals

The mission of any organization should define its purpose and its relationships with its clients. The mission can then provide the basis for planning, decision-making and direction. The proposal to establish a certification program linked to PhilHealth accreditation presents a dilemma for any certification organization.

The very fact that the proposed certification program will be directly linked to the payment of benefits by PhilHealth sends a message of regulation and control. Whereas the construction of the draft certification standards and criteria promote a quality improvement philosophy. Is it the mission of the certification organization to be a regulating body or is it to be a quality improving body? (See also Greater Accountability above.)

The mission of the certification program has to be clear and unambiguous. In line with accepted best business practice, the mission should be developed with and communicated to all relevant stakeholders. Critical in this process is the identification of all stakeholders and effective engagement of them in the process. In the end, the mission must clearly state the purpose and direction of the certification organization and all communication from the certification organization should provide a consistent message.

An articulated mission provides direction for the development of the certification organization and its services. The mission, in turn, must be supported by clearly enunciated goals. The goals should be consistent with the mission and values, the identified and anticipated needs of TB DOTS centers and reflect trends and issues in TB management and the Philippine society.

Another issue to be articulated is whether the goal of certification is the maintenance of minimum acceptable standards or is it a process of continuous improvement of the standards of care. This would present a significant challenge for the certification organization. The Consultants believe there is a real need to shift the focus from 'passing' the certification 'test' (minimum acceptable standards) every so many years to using the certification standards and criteria as a framework for ongoing management and quality improvement within the TB DOTS centers. This will only occur when there is an acceptance of the benefits of sustained effort in maintaining the focus on the intent of the standards and criteria. The Consultants believe the certification organization should articulate continuous quality improvement as a goal.

The certification organization must be guided by a defined set of values that are evident in all services and activities. The values should specifically relate to relationships with TB DOTS

[14] The generic term 'governing body' is used in preference to other terms, such as board of directors, as the legal status of the certification organization may dictate the exact classification and specific duties of the members of the governing body.

centers and responsibility to them, social responsibility and ethical issues. An explicit statement of ethical principles must guide the behavior of the certification organization, including the avoidance of conflicts of interest.

Recommendation 3. The certification organization must develop and promulgate a clear and unambiguous mission statement.

Recommendation 4. The certification organization must identify its core values and articulate those values to all stakeholders.

Recommendation 5. The certification organization must develop clearly enunciated goals for the certification organization and the certification process. Continuous quality improvement should be a goal of the certification program.

Recommendation 6. The certification organization must develop and enunciate the ethical principles guiding the organization.

The Role of the Governing Body

The governing body has ultimate accountability for the organisation and its performance. It creates the organization's vision and strategic direction. The governing body has a key influence on the behaviour, culture and achievements of the certification organization. The governing body is critical to the success of the certification organization.

Selecting the right people for the governing body is essential. The governing body must be appointed according to the specific requirements of the certification organization and not according to perceived seniority or preference for stakeholder balance. Stakeholder balance may be necessary, but appointment must be based on the ability of the appointee to contribute to the mission and goals of the certification organization. The term of office and the re-appointment process must be defined. Newly appointed members of the governing body must be oriented to ensure an understanding of their responsibilities and duties.

The governing body must meet regularly and develop systems to ensure continuity of governance between meetings. Terms of reference, membership and procedures must be defined (and documented) for the meetings of the governing body and all committees within the certification organization.

The crucial function for the governing body is to specify why the organisation exists (mission) and what it wants to achieve (goals). The mission and goals have to be clear and unambiguous. The mission and goals give direction for the organization's actions and behavior. Having established the mission and goals, the governing body must provide leadership and accept overall responsibility for the organization's achievements, the quality of the certification service and for the resources utilized.

Specifically, the governing body must ensure the financial viability of the certification organization by developing appropriate budgeting, reporting and auditing processes that are consistent with statutory requirements and accepted Philippine standards. This will also include a risk management plan appropriate to the needs of the certification organization. The plans should encompass occupational health and safety for staff and surveyors, fraud prevention, audit, insurance policies and fixed asset management programs.

Lastly, the governing body must have systems to ensure there are effective working relationships within the organization, with the TB DOTS centers and with other relevant

stakeholder organizations and individuals. The governing body should regularly assess its own performance, the performance of individual members and the performance of the certification organization.

Recommendation 7. Criteria for appointment, duties and responsibilities and term of office should be established for the members of governing body.

Structure and Mechanisms of the Governing Body

The structure and mechanisms adopted by the certification organization's governing body will be influenced by a variety of factors such as legal requirements and the size of the organization. And with the potential for considerable growth, the governing body will need to regularly review how effectively its structures and mechanisms assist it to govern the organization.

The mechanisms used by the governing body to achieve the certification organization's goals should include:

- establishing the organization's by-laws within the relevant legal framework
- establishing policy
- strategic planning
- delegating to relevant persons and bodies such as committees and working parties
- allocating resources
- requiring regular reporting on key organizational activities
- promoting the organization and lobbying on its behalf
- establishing strategic working relationships with those external to the organization

The by-laws are the rules adopted by the governing body for the operation of both the certification organization's internal and external affairs. Policies outline an organization's position on a given subject while procedures describe the recommended or mandated steps for an activity. By-laws, policies and procedures specify in practical terms how the organization's values and goals are to be achieved. They will need to be consistent with the organization's goals, role and responsibilities, as well as accepted industry practices, professional standards and statutory requirements.

The governing body must also establish mechanisms to look at its own performance and the ways it can improve organizational performance. Self-evaluation is an important mechanism to ensure organizational performance improvement. Self-evaluation can provide the governing body with the opportunity to look at what it has achieved, the effectiveness of the various mechanisms it has used, the difficulties and challenges it is currently facing and opportunities for the future.

When looking at its performance, the governing body should identify specific indicators (including some outcome measures) to assess the effectiveness and efficiency of its performance. These indicators should relate to the:

- achievements (e.g., certification outcomes, financial outcomes, *et cetera*); and
- effectiveness and efficiency of structures and mechanisms employed by the governing body (e.g., evaluating governing body meetings, the organizational structure, its committees, reporting structures, compliance with policies and procedures)

The self-evaluation should focus on issues that will assist the governing body to improve its performance in leading the organization.

Recommendation 8. The governing body should establish appropriate structures and mechanisms for effective governance including systems to evaluate the performance of the governing body.

MANAGEMENT

Organizational Structure

Effective organizational and functional relationships between departments and services, committees and staff are necessary to support an integrated approach to service delivery. These relationships include the lines of responsibility and accountability and communication channels.

Unfortunately, there are just too many variables to be considered in recommending an appropriate management structure for the proposed certification organization. Management structures must be tailored to the requirements of the organization. For example, large, centralist organizations require one form of management structure and highly regionalized organizations need another. Very small organizations can be very informal, whereas very large organizations require many more formal arrangements. Furthermore, management structures need to be adaptable to change as the organization changes. No matter what type of organization is established, growth in certification will demand change in the management structure. Compound this with the potential for more than one organization to be certifying TB DOTS centers and the problem to identify the appropriate management structure magnifies. The Consultants cannot recommend a preferred management structure.

However, a few issues must be considered no matter what form of organizational structure is adopted.

All staff in the certification organization must have a role statement. This role statement should include at least the following:

- Background to the existence of the position
- Main purpose of the position
- Key internal and external relationships (lines of communication)
- Key roles, accountabilities and responsibilities (these should clearly relate to the organizational mission and goals)
- Skills and competencies for the position

A model generic role statement or position description for professional staff in a certification organization can be found in Appendix B.

Ideally, each role statement should include a copy of the organizational chart clearly demonstrating the relationships between the various staff in the organizational structure.

All staff should be appointed on the basis of clear and unambiguous criteria through a transparent and procedurally fair process. Ideally, the selection criteria should include the skills and competencies needed for the position.

No matter what structure is adopted, a regular review of the organization's structure will help ensure it supports the organization's activities. Such a review will be relevant particularly following a significant change, such as an alteration of the organization's size, its services or role.

Recommendation 9. All staff in the certification organization must have a role statement.

Recommendation 10. All staff should be appointed on the basis of clear and unambiguous selection criteria through a transparent and procedurally fair process.

Recommendation 11. The governing body should regularly review the organizational structure to ensure it supports the organization's activities.

Executive Officer

Someone in the certification organization must assume the responsibilities of executive officer. Executive officer refers to the individual with a key role in the day to day management of the certification organization and its specific services. The position may have another appropriate title. However, regardless of the title, this person must define how the strategic direction determined by the governing body will be achieved. set forth by the latter. The executive officer must play a key role in creating a culture of customer service, team work, continuous improvement and innovation.

The governing body must delegate authority to the executive officer and ensure the responsibilities are defined so that the organization is managed effectively. The executive officer must provide leadership and act according to corporate policies, delegated authority and instructions of the governing body that reflect the values, mission and goals of the organization. The executive officer must be directly accountable to the governing body for implementing the policies and programs set out by the governing body.

The appointment of the executive officer is critical to the certification organization because the executive officer shapes performance within the organisation. Their behaviour clearly indicates to TB DOTS centers and the staff and surveyors of the certification organization,and others, the values, goals and expectations of the organization. Continuity of management must be assured during periods when the executive officer is absent.

The governing body must focus on evidence that the executive officer (and managers) effectively lead and manage the organization.

Recommendation 12. The governing body must delegate authority to an executive officer and ensure the responsibilities are defined so that the organization is managed effectively.

Structures to Assist the Executive Officer

The organization's structure and communication channels are important in supporting the performance of the executive officer and other staff. The governing body should consider whether the structures it has established appropriately support the executive officer to lead staff and surveyors and ensure the organisation provides quality services. It may review delegations of authority to assess whether these allow the executive officer to fulfil their duties and meet expectations. It may consider whether the delegations clearly distinguish between the roles of the executive officer and the governing body. It also may be useful to consider if the executive officer's accountabilities, responsibilities and performance requirements appropriately focus on shaping organisational performance, achieving outcomes, empowering staff and making the organization's vision a reality.

Strategic and Operational Plans

The certification organization's values and goals will provide the basis for its strategic direction. The organization's values will state its core beliefs. These should include a

commitment to providing quality certification services. The goals state what the organisation wants to achieve.

Long and short term goals are essential for effective management of the certification organization. The strategic plan identifies the organization's long term direction and where its resources are to be allocated. In contrast, operational plans specify what is to be achieved, usually within a twelve month period.

The certification organization will need to develop strategic and operational plans upon the inception of the organization. To assist the development of the plans, those responsible for making the plans should consider whether the plans appropriately reflect the needs of the principal stakeholders. Of course, the certification organization will need to find a balance between the wide range of needs and expectations of its stakehoders and available resources (both human and financial).

A critical element of the operational plan will be certification targets.

Recommendation 13. The certification organization must develop a strategic plan and ensure that plan is regularly reviewed in terms of goals and achievements.

Recommendation 14. The certification organization must develop a operational plan and develop systems to measure performance against the operational plan.

THE CERTIFICATION PROCESS

The Consultants have reviewed the certification process described in the *Certification of TB DOTS Centers and Providers Systems Design*[15] document and used as the basis of the pilot program. The process described is generally a sound process. Therefore, the Consultants will only address those elements of the process that, in the opinion of the Consultants, would benefit from change or modification.

ENTRY INTO THE CERTIFICATION PROGRAM

All potential TB DOTS centers must be informed of the survey and certification procedures prior to making any application for certification. This information should be included in an information pack provided to prospective clients of the certification organization. Included in that information must be their rights and responsibilities, including requirements that the applicant:

- complies with the relevant provisions of the certification program;
- makes all necessary arrangements for the survey, including provision for examining documentation and access to all areas, records and personnel;
- only claims certification for services which have been granted certification; and
- does not bring certification by the certification organization into disrepute or make any misleading or unauthorized statement regarding their certification.

The applicant TB DOTS center must also understand that upon suspension or withdrawal of their certification, they must discontinue any advertising or promoting that refers to their certification status and return any certification certificates or documentation to the certification organization.

[15] Acuin, JM. *Certification of TB DOTS Centers and Providers Systems Design*. Written through the support provided by the Office of Population, Health and Nutrition, Philippine Mission, United States Agency for International Development, under the terms of Contract No. 492-C-00-02-00031.

The nature of the services to be provided by the certification organization must be clearly explained to applicant TB DOTS centers.

Ideally the obligations of both parties should be explained in a service contract and that contract should be duly executed. Although the myriad legal issues that may arise out of the contractual relationship between the certifying organization and the applicant TB DOTS center can not be anticipated, the contract should also specify how such conflicts can be settled, the remedies to which the parties may have recourse and the applicable legal jurisdiction.

Recommendation 15. The certification organization should develop an information pack for prospective TB DOTS centers outlining rights and responsibilities of the TB DOTS center.

Recommendation 16. The certification organization should develop a service contract for the services to be provided.

ADVICE TO TB DOTS CENTERS

Advice and information must be available to TB DOTS centers to assist them to interpret and implement the certification standards and criteria. The certification organization must assure the quality and consistency of that advice. To assist in that process, the certification organization should develop clear policies to:

- guide the scope of such advice;
- protect the interests of the accreditation body;
- ensure consistency; and
- ensure that the inquiries and the advice given are documented, monitored, and used for future education and development.

Recommendation 17. The certification organization should develop a policy and systems for the provision of advice to applicant TB DOTS centers.

PLANNING FOR SURVEY

Survey Team Size

For the initial pilot process a team of three persons was recommended. The recommendation stated that the goal was to have a range of interests represented on the survey team. The pilot survey teams had a representative from PhilHealth, the Department of Health and PhilCAT. The aim was to ensure that the three principal stakeholders were represented.

It must be queried whether three surveyors are required. In resolving that question, the first issue to be considered is the need to have the three principal stakeholders represented on a survey team. The role of the team is to assess the TB DOTS center against the standards using the designated survey instrument. The surveyors should all have training in the standards and application of the survey instrument. They are not there to represent vested interests. What is important is that members of the team understand DOTS and are familiar with the key issues impacting TB DOTS centers.

Following discussions with key PhilHealth personnel, it has become apparent that a representative from PhilHealth is not required to participate in the certification survey. One of the initial 'drivers' for the certification program came from PhilHealth. The goal was to outsource the certification process to a third party. PhilHealth wants to have confidence in an independent certification process and make accreditation decisions based on certification

outcomes. In the face of this stated position it does not make sense to involve a PhilHealth representative in the survey team.

Of course, the most efficient team is a team of one. However, there is always the risk of accusations of bias due to omissions or commissions. Having more than one surveyor limits the impact of individual bias and ensures all results are based on a consensus.

Recommendation 18. The survey team should comprise two surveyors chosen for their expertise as TB DOTS center surveyors and not as representatives of a stakeholder organization.

Time to Complete the Certification Survey

The individual pilot program surveys were completed within several hours. As the team became more experienced they were able to complete the evaluation in approximately two hours using the survey instrument. An anecdotal report from a TB DOTS center that participated in the pilot process suggests that the time taken was adequate to review and validate the standards. It was even suggested the review was almost cursory.

A full and proper evaluation using the survey instrument and taking time to verify and cross-validate should take between two and three hours for a pair of experienced surveyors. Extra time is often needed if problems are discovered and they require further investigation. New surveyors will take a little longer. This will be an issue as the program begins. A way to minimize the impact of newly trained surveyors taking longer to complete a survey is to pair them with a more experienced surveyor. Of course, this will not be possible from the outset.

The survey instrument requires a limited input of text reporting. Mostly, the ratings can be completed by 'ticking' a box. This facilitates the completion of the report within the time available at the TB DOTS center. An added advantage is that contemporaneous reporting ensures accuracy as things are not forgotten and if further clarification is needed to complete the report, the surveyors are still present in the TB DOTS center to seek clarification.

Selecting the Survey Team

When selecting surveyors for a survey, the certification organization must ensure that the surveyors are appropriate for the TB DOTS center to be surveyed. The surveyors must have the appropriate professional knowledge of the functions, activities and associated procedures of the TB DOTS center being surveyed. If it is a rural TB DOTS center, then the at least one surveyor should have rural experience. If it is a hospital clinic TB DOTS center, then at least one surveyor should have hospital experience. This will ensure the team has sufficient understanding of the organization to make a reliable assessment of the performance of the TB DOTS center against the accreditation standards

The certification organization should complete checks to prevent conflicts of interest for the surveyors.

Wherever practicable, the membership of the survey team is endorsed by the applicant TB DOTS center. A letter could be sent to the applicant TB DOTS center advising of the survey team members and that letter could give the TB DOTS center seven days to raise any possible conflict of interest.

EVALUATION

The certification organization must lead by example. It must constantly evaluate the quality of the service it provides. Service delivery must be evaluated by the professional staff to ensure the quality of surveying and reporting and the consistency of survey practice. This should include:

- analysis of why an organization failed to gain certification status and how the certification organization might have offered its services differently to promote a positive outcome
- the provision of practical support to unsuccessful organizations to assist them to continue positively toward quality improvement
- customer (the TB DOTS center) feedback on the survey, the survey team and the survey report. A proforma questionnaire should be developed and sent to the TB DOTS center immediately after the survey.

Evaluation data collected must then used to improve services and surveyor performance.

THE INTEGRITY OF THE CERTIFICATION DECISION

The process proposed for making the certification decision is similar to the process used by many certification programs around the world.[16] The survey team completes a report following the survey visit. This report contains an assessment of the performance of the TB DOTS center against each of the standards and criteria. It also contains recommendations and commendations. The report is provided to the certification organization with a recommendation for certification status. A decision-making committee within the certification organization reviews the surveyors' reports, discusses any issue consequent to the review of the reports and then makes a certification decision. The certification status is based on the assessment process of the decision-making committee.

It is of interest to note that this was not the process used during the pilot process. The decision to certify was taken following a consensus meeting of the participating surveyors. This was done to facilitate the process and was not intended to supplant the recommended process.

However, a number of modifications to the originally proposed process must be considered to ensure the integrity of the certification decision.

The Certification Survey Report

The certification survey team must conduct a comprehensive review of the TB DOTS center by testing compliance with all of the standards and criteria. They then must complete a report on their findings in a relevant, timely, and accurate manner. The report must contain enough information for the decision-making committee of the certification organization to make a well-informed decision on the certification status of the TB DOTS center.

Recommendations and decisions regarding compliance with the standards and criteria must be based on sound evidence. The surveyors must be sure that critical observations made by individual staff members in the TB DOTS center are verified either by corroboration from others, documentation or direct observations. If the survey team disagrees with the TB DOTS center's self-assessed performance, then comments are required from the surveyors explaining the rationale or evidence relied upon by them to disagree with the center. Adverse findings must be supported by citing the evidence relied upon to make the adverse finding.

[16] Scrivens E. International trends in certification. *Int J Health Plan Mgt* 1995 10(3): 165-81.

Given the simplicity of the certification survey report, its writing can largely be completed before the certification survey team leaves the TB DOTS center. If this cannot be done because of the need to meet travel commitments, the survey team should complete the survey report as soon as possible after the survey.

In the original proposal for the survey process and in the pilots, each surveyor completed and submitted a report. It is recommended that this not be the practice in the future. If the two surveyors provide conflicting advice to the certification organization, then the decision-making committee is left in a quandary on how to interpret the performance of the TB DOTS center against a specific standard or criterion. The members of the decision-making committee do not have the advantage of having visited the TB DOTS center themselves. A better approach is to have only one consolidated report provided to the decision-making committee. The ratings and comments in the report would be consensus of the two surveyors. If they disagreed on a relevant finding, they could discuss the issues and compare and contrast the evidence they relied upon to come to a particular conclusion. Furthermore, if this were done before leaving the TB DOTS center, they could reconfirm or seek additional evidence thus helping them come to a consensus viewpoint. If, in the rare situation, they could not agree, then they would both be required to provide in writing the rationale for their respective views.

The certification survey report should not make any recommendation regarding certification status. It should, however, contain enough commentary to substantiate any recommendations made in the report. The report may make constructive recommendations regarding how the TB DOTS center's performance could be improved. In fact, this should be encouraged, as it will help the improvement process.

The team leader will be responsible for ensuring the completeness of the report and that the other team member is satisfied with the report contents. The team members must keep any handwritten notes for approximately six months after the survey. The safe keeping of these notes only becomes important if a TB DOTS center wishes to contest any of the report's findings or wishes to appeal a certification decision.

As stated above, the certification survey report must contain enough information to enable the decision-making committee to make a well-informed decision on the certification status of the TB DOTS center. When writing their report, the surveyors must remember that those reading the report have not visited the TB DOTS center. The report must 'paint a picture' of the circumstances of the particular TB DOTS center. The surveyors may wish to attach additional documents from the TB DOTS center to support their key findings described in the report. It should be noted however that the attachment of additional documents is not to replace the need for a comprehensive and detailed report.

Recommendation 19. Only one consolidated consensus report should be prepared and submitted by the survey team.

Recommendation 20. When the survey team disagrees with the TB DOTS center's self-assessment the survey report must contain comments explaining the rationale or evidence relied upon to make the adverse finding.

Rating the Standards and Criteria

The dictionary defines a rate as an estimate of value. Consequently, rating should be used to refer to the process used either by the TB DOTS center or the surveyors in assessing the TB DOTS center's achievement of the standards and criteria in the self-assessment and survey processes.

In the proposed system design, the standards and criteria were to be rated 'fully met', 'partially met' or 'not met'. In the pilot process, the standards and criteria were rated simply as 'yes' or 'no'. It is the Consultants' view that measuring the performance of the standards and criteria with a simple 'yes' or 'no' is not possible given that the standards and criteria, in many cases, focus on the effectiveness of processes and actual outcomes.

The literature on rating activities strongly supports a system based on a Likert scale with a range of responses.[17] There are a variety of possible response scales (1-to-5, 1-to-7, 0-to-4). The scale may contain verbal 'anchors' for the two extreme levels or each point on the scale could be 'anchored' with a verbal label. All of these odd-numbered scales have a middle value that is often labelled 'neutral', 'average' or 'undecided'. It is also possible to use a 'forced-choice' response scale with an even number of responses and no middle choice. In this situation, the respondent is forced to decide whether they lean more towards the 'agree' or 'disagree' end of the scale for each standard and criterion. This is often a preferred as many raters choose to 'sit on the fence'.

In the proposed system design, the use of a three-point scale ('fully met', 'partially met' or 'not met') presents a number of problems. The verbal 'anchors' of 'fully met' and 'not met' are extremes. Most TB DOTS centers are unlikely to submit themselves to certification if they believe they are unable to comply with the requirements of the standards and criteria ('not met'). Similarly, the limited experience and lack of infrastructure will make it difficult for TB DOTS centers to demonstrate complete compliance with the standards and criteria ('fully met'). Thus the most common rating will be 'partially met'.

A report indicating 'partially met' for the majority of standards and criteria will not be useful to guide improvement activities within the TB DOTS center, unless accompanied by considerable amounts of qualitative information written by the surveyors. This in turn places a greater demand on the surveyors. Furthermore, it makes it difficult for the certification organization to extract meaningful performance information from the reports. The certification organization must be able to analyze TB DOTS center performance data to test whether standards have been set to high or too low and to provide focussed guidance on quality improvement.

A better rating system is required and it should be based on an even number Likert scale. The simplest of these would be a four-point scale with verbal 'anchors' provided for each point. A better system would be based on a six-point scale. The larger scale provides great opportunity to measure performance between TB DOTS centers and performance within a TB DOTS center over time. Given the focus of the certification process is on the demonstration of achievement, the Consultants recommend verbal 'anchors' based on 'achievement' language.

The following is presented as an example of a simple six-point Likert scale:

1. No Achievement
   The requirements of standard / criterion are not met. No effort has been made by the TB DOTS center to address the standard / criterion
2. Some Achievement
   The requirements of the standard / criterion are scarcely met. Some initial effort has been made by the TB DOTS to address the standard / criterion
3. Low Achievement
   The requirements of standard / criterion are partially met. Minimal effort has been made by the TB DOTS to address the standard / criterion

[17] Trochim, WM. The Research Methods Knowledge Base, 2nd Ed. Atomic Dog Publishing, Cincinnati, Ohio, 2000.

4. Moderate Achievement
   The requirements of the standard / criterion are generally met in most circumstances.
5. Extensive Achievement
   The requirements of the standard / criterion are fully met in the majority of circumstances and have been for some time.
6. Outstanding Achievement
   The TB DOTS center has a track record of fully meeting, if not surpassing, the requirements the standard / criterion. This rating should be reserved for the re-certification process.

Despite best efforts to define the rating points, a certain amount of random error always affects a rating process as some raters simply interpret the calibration of the rating scale differently so as to make generally higher or lower ratings. Using the consensus of two surveyors will alleviate this random error somewhat. The magnitude of difference between the surveyors can help indicate whether or not the ratings they gave are replicable / reliable or not. Raters who systematically give low or high ratings) as well as those who are wont to regress to the mean may be identified later.

Recommendation 21. A new rating system should be introduced based on an even number Likert scale.

Recommendation 22. Each rating should be the consensus of the two surveyors.

The Decision Process

The process for determining the certification status needs to be objective and transparent. The credibility of the certification process depends on its perceived objectivity and transparency. A review of various certification programs throughout the world reveals that there are essentially two ways to make certification decisions.[18] The first is to use processes of collective judgment. The other is to use a scoring system. There are advantages and disadvantages with both approaches.

Currently there is no system for determining certification status.

In the proposed certification system design, certification decisions would be made by the decision-making committee of the certification organization based on the findings of the survey team.
It was recommended that the certification decision be based on a scoring algorithm that considers minimal passing ratings on the certification criteria. Depending on whether the criteria are in the core list or not, the individual standard scores are then weighted and the resulting products are aggregated. Consideration of both the individually weighted standard scores and the aggregate criteria score would indicate whether the center has met the minimum expected compliance with the certification standards.

Clearly it can be argued that a scoring algorithm system would ensure the objectivity and transparency of the decision-making process. All the ratings would be considered in a systematic way, a numerical value assigned and a final tally determined by a mathematical algorithm. However, most certification programs use processes of collective judgment, as scoring systems are complex and expensive to establish.[19] A scoring algorithm system is not

[18] Shaw C. External Assessment of Health Service Standards. CASPE Research, 11-13 Cavendish Square, London, W1M 0AN, 1999.
[19] Smith D. Personnel correspondence with Dr Dennis O'Leary, Chief Executive, Joint Commission on Accreditation of Healthcare Organizations (JCAHO). Chicago, USA.

recommended at this time.

The process of collective judgment is recommended. However, to ensure objectivity and consistency in decision-making, the certification organization should establish guidelines or rules for each possible certification outcome.

The first consideration is whether to develop guidelines or rules. The word 'guidelines' implies a less stringent application than 'rules'. Guidelines would provide a degree of flexibility. This flexibility is probably required given the 'newness' of the certification program.

The Consultants recommend the development of guidelines for decision making. The guidelines should give priority to the following issues in the following order:

1. Paramount consideration must be given to standards and criteria that impact the patient and their safety;
2. Consideration must then be given to issues of staff competence and safety;
3. A global assessment should be based on the range of achievement levels for the standards and criteria;
4. A consideration of how certification status will facilitate further quality improvement must be made; and
5. An assessment of consistency of certification decisions between different TB DOTS centers and the same center over time must finally be made.

The decision-making committee does not have an opportunity to have any of its concerns, consequent to the review of the report, clarified. In many certification programs this is addressed by having the survey team leader, or other team member, available to clarify any issues raised by the decision-making committee. This can be done by teleconference to limit the cost. After points of clarification are settled, and without the survey team member being present, the decision-making committee determines the certification status. The team member does not participate in the certification decision.

In summary, the decision-making process should be based on an analysis of a comprehensive report of the survey and any associated supporting documentation. A decision-making committee should review the surveyors' report, discusses any issue consequent to the review of the report and then make a certification decision. Having a consistent body of reviewers making the certification decisions will better ensure objective outcomes. The certification status should be based on the collective judgment of the reviewers, assisted by guidelines.

If disagreement exists within the decision-making committee, the status should be resolved on a vote using simple majority. The rules (as apart from the guidelines) governing the decision-making process must exclude the introduction of new information into the discussion and ensure procedural fairness (e.g., avoidance of conflicts of interest).

As an organization promoting quality improvement, the certification organization too must have quality control and quality improvement processes. The certification organization should establish systems to review and evaluate certification decisions for consistency. Furthermore, the certification organization should analyze why a TB DOTS center failed or achieved low certification status and how the certification organization might have offered its services differently to achieve a positive outcome for the TB DOTS center.

Recommendation 23. The certification decision should be based on the collective judgement of the decision-making committee.

Recommendation 24. A team member should be available to provide clarification for the decision-making committee.

Recommendation 25. The decision-making process should be guided by rules to ensure procedural fairness and by guidelines to ensure appropriate and consistent certification decisions.

Clarification and Additional Requirements for Certification

In the proposed certification system design, it was suggested that all unresolved issues and all additional requirements be addressed by the TB DOTS center before a certification decision is made.

This creates a number of issues that will complicate the certification decision process.

One could imagine a situation of non-compliance with a number of criteria. Does the certification process continue, or is the decision held in abeyance until the TB DOTS center has complied with the requirements? Pragmatically, the TB DOTS center should not apply for certification until it is reasonably confident of its ability to meet the standards. It seeks certification and the findings at the time of survey determine the certification status.

However, on the other hand one could imagine a situation requiring one additional piece of evidence to demonstrate compliance with an important standard. For example, the survey team may require additional evidence about adequacy of drug supply. This evidence may not have been available to the surveyors' satisfaction at the time of survey but would be easy to obtain (e.g., a document from the Department of Health) within a very short timeframe. Should the certification decision be held up pending provision of the evidence? If it is one piece of evidence, then it is easy to accept some latitude. However, what if it was many pieces of evidence? What if it would take two months to get the evidence together?

The certification organization will need to develop clear rules about seeking clarification and additional evidence.

The Consultants believe the certification organization has to be pragmatic about its approach to the certification decision process. The certification decision should be made based on the findings at the time of survey. However, a greater range of certification outcomes should be considered (see below).

Recommendation 26. The certification decision should be based on the findings at the time of survey.

Certification Decisions

The Duration

The period of certification has been suggested to be 12 months. This is an incredibly short period of time. Annual surveys would impose a significant burden on the TB DOTS centers and the certification organization. Very few international certification programs require annual surveys. Many require an audit process on an annual basis but not a survey. The audits are either conducted by a smaller survey team or are purely a 'paper exercise'.

The Consultants highly recommend a longer certification period. At the very least, it should be extended to two years, however three years with audits would be preferable given the cost

implications of more frequent surveys. A variation worthy of consideration is an option with a short period of certification after the first survey but subsequent surveys could result in longer periods of certification. This is the Consultants preferred option and could be outlined as follows:

- First certification → 12 months
- Second and subsequent certifications → 3 years with annual audits at 12 months and 24 months

Rules would need to be established to deal with those rare situations when a TB DOTS center did not meet the requirements of an audit.

The best approach to this situation would be first to seek clarification and additional information and then determine to limit the certification period to the date of the next audit (or survey if the concerns were consequent to the second audit, but noting this would be the situation in any case).

The Outcome

Only one of two outcomes has been proposed:

- Certified; or
- Not certified

Given the need to use the certification decision for an accreditation determination by PhilHealth, it is probably not unreasonable to limit the possible outcomes to 'certified' or 'not certified'. However, the 'back and white' nature of the outcome could prove to be very discouraging for some TB DOTS centers. Furthermore, the issues raised above impact on the decision-making process.

An alternate approach is to provide a number of certification outcomes, albeit noting that PhilHealth will only accept one outcome for purposes of accreditation.

The easiest outcome to consider is that of a TB DOTS center that has a survey report indicating that all of the standards and criteria have been rated in the upper end of the rating scale. This TB DOTS center would be 'Certified'. The information would be forwarded to PhilHealth and it due course it would be accredited by PhilHealth.

However, what should happen to the TB DOTS center when most of the standards and criteria have been rated in the upper end of the rating scale but there are one or two criteria that have been rated in the lower end of the rating scale (but not 'No Achievement' ratings)? One could imagine that it would not be appropriate to grant 'Certified' status in this case, particularly if the criteria were critical to the successful operation of a TB DOTS center. An alternate decision is required.

In most international certification programs, the period of certification varies according to the assessed performance of the clinical service. If the greatest majority of standards are met at a significant level, then a longer period of certification is granted. If there are a few deficiencies, and it is reasonable to expect the service should be able to address those deficiencies in the timeframe, a lesser period is granted. The usual period would be 12 months. If a subsequent survey resulted in a 12-month certification, the TB DOTS center would have to pay the additional fees associated with the additional survey.

In the proposed certification system design, it was suggested that the decision process could be held in abeyance whilst additional information was being sought. As discussed above this is not recommended by the Consultants.

The alternative to this would be to allow the decision process to proceed and make a decision on the evidence available at the time of survey. The certification decision would then include 'provisos'. Provisos would be used to indicate certain issues must be addressed by the TB DOTS center within a defined timeframe (3 or 6 months). The issues would be important yet not significant enough to warrant non-certification. The TB DOTS center would be required to provide evidence that the issues of the provisos have been addressed within the determined timeframe (3 or 6 months). On-going certification would be contingent upon satisfactory evidence being provided to the certification organization. The evidence would be in the form of documentation. If the evidence could only be obtained by a follow-up visit, then the matter could not be the subject of a proviso and an alternate certification decision would be made.

The Consultants recommend the following certification outcomes:

- Certified (initial) 12 months
- Certified (subsequent) 36 months with annual audits
- Certified with provisos 12 months with evidence due in 3 or 6 months
  Note: this can be only for subsequent certifications
- Not certified

Recommendation 27. The duration of subsequent certification should be extended from one year to three years.

Recommendation 28. A range of certification outcomes should be considered, especially for the subsequent certification.

Recommendation 29. The certification organization should establish guidelines for each possible certification outcome to ensure objectivity and consistency in certification decision-making.

Recommendation 30. The certification organization should establish quality control and quality improvement systems to review and evaluate certification decisions for consistency.

Appeals

Grounds of the Appeal

Any TB DOTS center that is the subject of a certification decision must have the right to appeal the decision. To ensure there is a common understanding and a transparent process, the grounds upon which an appeal can be lodged must be known.

It is recommended that the grounds for appeal be limited to a TB DOTS center's belief that:

- An error in fact or due process occurred in the formulation of the earlier decision; and/or
- Relevant and significant information that was available to the surveyors was not considered in the making of the decision; and/or
- The decision of the decision-making committee of the certification organization was inconsistent with the information put before that Committee.

No other basis of appeal should be allowed. Legal advice may be necessary to ensure consistency with Philippine law.

Reconsideration of Decisions

Alternate options to appeals should always be considered. By their very nature, appeals are costly for all involved and can be adversarial in nature leading to lasting 'hurts' for those concerned. It is not in the interest of the certification organization to cause animosity and create adverse publicity. Before convening an appeals committee, a senior officer of the certification organization who was not part of the decision-making committee, should, if appropriate, seek a reconsideration and review of the original decision by the decision-making committee, in accordance with a process approved by certification organization.

An appeals committee should only be convened if the certification organization is satisfied that the applicant has exhausted all other avenues of reconsideration and review of the relevant decision.

Lodging the Appeal

When lodging an appeal, the TB DOTS centers must be requested to provide detailed information and comments on the reason for the appeal and specific items raised in the certification report that the TB DOTS center may wish to dispute. In any appeal, it is the applicant that has the onus of proof to establish the grounds of the appeal. The applicant should state the grounds upon which they are making the appeal (see grounds for appeal outlined above).

The certification organization should set timeframes for lodging of appeals. For example, the certification organization may require appellants to lodge an appeal within 30 days from receipt of the written advice of the certification decision. A further period could be allowed for the TB DOTS center to provide written documents to support the appeal.

Most appeal processes require a lodgment fee to be paid. The fee has to be fair and reasonable to cover the cost of the appeal but should not be set so high as to actively discourage appeals.

The Appeal Committee and Process

The appeals committee can not comprise any individual who was party to the original decision of the certification organization to which the appeal relates. Rules for the conduct of the appeal must be developed. Issues to be considered by the rules include the rules of evidence and the entitlement to consider other information. Rules on how decisions are made by the appeals committee and the decision outcomes also need to be developed.

Most importantly, the appeals committee must act according to the laws of natural justice and decide each appeal on its merits. The certification organization must be bound to accept the advice of the appeals committee.

A predetermined timeframe must be adhered to in considering any appeal.

Recommendation 31. The certification organization must develop a transparent and procedurally fair appeals process.

EDUCATION SERVICES

A specific aim of the certification process is assist TB DOTS centers improve the care and services they provide. The methods associated with the certification process achieve much of that aim. However, the certification organization may have an opportunity to take on a more proactive role by providing a range of educational and informational services to support best practice in TB DOTS provision.

In cooperation with PhilCAT, the certification organization, because of its direct contact with TB DOTS centers, is well placed to foster the improvement in knowledge and skills of health care personnel in TB care. The certification organization could become an identified resource in the field of quality improvement TB care. There are numerous opportunities for the certification organization to take a leadership role in quality TB care.

HELP DESK

Once operational, the certification organization should consider the establishment of a simple 'Help Desk'. Organization staff would be available to answer questions on all aspects of the certification standards, the certification process and implementing quality improvement programs. Requests for information could be made by mail, telephone, fax or e-mail. E-mail, postal mail, or fax would be the preferred medium as the questions could be directed to the most appropriate person to answer the query and it does not interupt other work activities. A variation on this would be to operate a moderated internet 'chat room' allowing questions to be posted on a website. Answers would be posted by others who have experience with similar problems after vetting by appropriate staff within the certification organization. The resources required for this service are small compared to the benefit received by the health care personnel trying to 'fix' quality problems in the TB DOTS centers.

WORKSHOPS

Workshops run by the certification organization are another effective way to support and promote the standards and quality improvement in TB care. The workshops could provide conceptual and practical information relating to the standards and improving performance in TB care. Participants would have the opportunity to discuss specific issues and gain practical information during the workshops. The workshops would need to be conducted in a variety of locations around the country.

The economics of running the workshops needs to be carefully considered. The workshops are both educational and promotional in impact. Generally, people do not perceive value from something unless they have to make a contribution to it. It is recommended that a small fee should be charged to off-set some of the costs of running workshops. Alternatively, sponsorship for the workshops could be sought.

PUBLICATIONS

One of the most useful things the certification organization can do to support quality TB care would be to publish a range of manuals and guides to advise TB DOTS centers on the standards and criteria, the certification process, implementing quality improvement programs and best practice management in TB care. These should be available for purchase at a nominal cost though many of these documents should be provided for within the certification application fee.

NETWORKING

Another useful service for the certification organization to consider is networking. The certification organization could act to assit health care personnel working in TB DOTS centers make contact with others working in similar circumstances or facing similar problems to share ideas on how to overcome the problems and continuously improve. Again, this is a low cost program providing considerable benefit to those working 'in the field'.

CONSUTANCY SERVICES

Consultancy services, to assist TB DOTS centers prepare for certification, present the certification organization with a number of dilemmas. If the certification organization actively assists a TB DOTS center, then there is an expectation within the center that a survey will result in a positive outcome. The process of the evaluation and certification decision, however are, and must remain, independent of any other process. The consultancy service cannot guarentee an outcome. A TB DOTS center would not want to engage a consultancy service from the certification organization unless there was some form of guarentee associated with the service. It is the view of the Consultants that this form of consultancy is best left to contractors engaged independently by the TB DOTS center.

Other forms of consultancy services could be developed in response to customer requests without creating ethical problems for the certification organization. The organization may organise and provide advice on implementing quality programs, refocusing quality improvement programs or planning and commissioning new TB DOTS centers to meet the certification standards. These services could be provided at commercial rates.

HUMAN RESOURCES

THE CERTIFICATION SURVEYORS

The effective recruitment, selection, development, deployment and performance management of certification surveyors is essential to assist the certification organization in fulfilling its mission. For most TB DOTS centers, the certification surveyors are the 'face and voice' of the certification organization. The surveyors are often the only people they will meet from the certification organization. How the surveyors represent the certification organization is critical to the ongoing credibility and success of the certification program. The surveyors are the ambassadors of the certification organization.

Categorization

Surveyors fall into three main categories and each has different implications for the certification program.[20] The Consultants' recommendation for which category of surveyor would best suit the Philippine situation can be found below in the discussion on cost.

Employees

The certification organisation may employ full-time or part-time surveyors. Having a cadre of staff fully committed to the certification program provides many benefits. They develop a high level of expertise, as surveying to the certification standards is the prime focus of their work. This improves consistency in rating and consistency in advice provided to the TB DOTS centers. Training needs are minimized, as the required workforce would be small. The major accreditation program in the USA uses, almost exclusively, employed surveyors.

However, full-time employees are no longer part of the health care workforce and can quickly become 'out of touch' with health care developments and issues impacting upon the TB DOTS centers.

[20] Bohigas L, Smith D, et al. A comparative analysis of surveyors from six hospital certification programmes and a consideration of the related management issues. *Int J Qual Health Care* 1998; 1: 7-13.

Contractors

The second category of surveyor is the independent contractor who devotes part of their time to certification. This is the approach used in many of the programs of Australia, Canada and New Zealand and in some programs in the USA. A larger workforce is required but, because these people are still very much part of the health care delivery system, their skills and knowledge remain contemporary. They can be contracted on an 'as needed' basis and they can be dispersed through the country. However, there are additional training needs because a larger workforce is needed and management of a larger, dispersed workforce is more time consuming.

Volunteers

The last category of surveyors is volunteers. These surveyors are professionals employed in the health system and the employer allows them to absent themselves from their usual employment to participate in a certification survey. No fees are paid to the surveyors. This is, in effect, how the pilot surveys were completed. The greatest advantage of volunteers, in addition to the cost savings, is the people volunteering their services are fully committed to the principles and ideals of certification and continuous quality improvement. However, as with contractors, there are usually additional training and management costs for the certification organization associated with volunteer surveyors because employers normally restrict the number of absences per year.

Discussion

In the long term, the certification organization will require in excess of 160 trained surveyors to assist the organization achieve its goals. They will need to be drawn from the ranks of doctors, nurses and health service managers. Doctors from a range of specialties and backgrounds will make up the largest group.

It is recommended that the certification organization appoint surveyors as independent contractors devoting part of their time to certification. There are many advantages to this approach. First and foremost, the surveyors will remain credible peers of those providing the services in the TB DOTS centers being surveyed. This facilitates a more open exchange and dialogue between the participants of the survey process. The surveyors, because they are still active participants in the clinical workforce, bring with them a clearer understanding of the environment and issues being confronted and addressed in the TB DOTS center. They are better able to provide actionable recommendations for improvement. The staff working in the TB DOTS center can better relate to the surveyors as colleagues confronting many of the same issues as they are.

The second major advantage is the surveyors themselves will learn how other services are addressing problems similar to the ones they are confronting in their own clinics and hospitals. They will be able to take away with them ideas on how to address issues having observed it in action in another clinic. Sometimes, of course, they will see how not to approach a service problem and that too is a learning experience.

Thirdly, as they are there critically appraising a TB DOTS center against the standards and criteria, they will return to their clinic or hospital more mindful of the need to review their own service against service standards. This can often be a powerful stimulus for improvement particularly when the surveyor knows their service will be subject to critical appraisal at some time in the future.

Recruitment

There is an obvious correlation between the number of TB DOTS centers to be surveyed and the number of surveyors required. The fact that many surveyors will not be available to participate in a great number of surveys, due to other work commitments, means a greater number of surveyors will be required to cover the number of certification surveys.

The arrangements for determining surveyor numbers, professional background, geographic location and skill mix should be documented and linked to the certification organization's planned program of work. This needs to be done in a systematic way and be continuously revised as the program expands.

Selection

The initial selection of surveyors should follow a special advertisement outlining the tasks, the commitments and the criteria for appointment. The selection criteria should be based on the identified skills and competencies required of a good certification surveyor.[21] A proposal for a set of core competencies for certification surveyors can be found at Appendix D.

Surveyors should not be selected on the basis of position held or on the basis of representation. A person from a prescribed position and representation may have the skills to be a surveyor but that is not necessarily so in all cases. Effective and comprehensive criteria must be used to guide the selection process.

Once the selection criteria are developed based on identified competencies, they should be made available to prospective surveyors. Consideration could also be given to carrying out a preliminary examination to ensure adequate levels of pre-knowledge. The most important knowledge domain for a surveyor is the theory and practice of quality assurance. Quality assurance and quality improvement are the foundation of the certification program. Good TB DOTS provision relies more on the knowledge of good clinical practice and service than on the specifics of the medicine of tuberculosis as the TB DOTS methodology is well founded in medical evidence.

A transparent selection process must then be developed to apply the selection criteria fairly to ensure the best available people are selected as certification surveyors.

Recommendation 32. Certification surveyors should be selected through a transparent selection process based selection criteria founded on the identified skills and competencies required of a good certification surveyor.

Terms of Engagement

The responsibilities and expectations of surveyors should be clearly defined and agreed with applicants prior to appointment. The expectations should include avoiding conflicts of interest, maintaining confidentialities, being impartial and objective, maintaining their knowledge of the standards and criteria and completing work on time. In return, the certification organization should clearly define what it will provide in return. The expected number of surveys, the remuneration policies and rates, the mode and standard of transport and accommodation should be included. Any responsibility for tax and personal accident insurance must also be addressed.

[21] Bohigas L, Smith DA, et al. A comparative analysis of surveyors from six hospital accreditation programmes and a consideration of the related management issues. *Int J Qual Health Care* 1998; 1: 7-13.

These issues should be incorporated in a simple agreement document to be signed by the executive officer of the certification organization and the surveyor thus acknowledging that both parties understand and accept the conditions of appointment.

Surveyors should also understand that their performance will be routinely monitored and feedback provided.

Appointment as a surveyor should be for fixed, renewable terms (see performance evaluation below). See also the recommended code of conduct for certification surveyors at Appendix E.

Recommendation 33. Certification surveyors should be appointed for fixed terms and renewal of appointment should be based on assessed performance.

Training and Development

Induction Training for the Surveyor Workforce

Induction training is critical for the successful introduction of new surveyors into the certification program.[22]

Induction training should be based on the international standards for accreditation induction training. These include:

- mission, values and strategic directions of the certification organization;
- the organization, rules and processes of the certification organization;
- legal and certification requirements;
- certification standards and criteria and their interpretation;
- evaluation procedure skills, including report requirements;
- performance expectations and evaluation systems; and
- strategies to continually improve the quality of the certification program.[23]

The induction-training program should take between one and two days depending on the experience of the trainee surveyors. In addition to the topics identified by the International Society for Quality in Health Care, the program must begin with training addressing the principles of quality assurance and quality improvement. This provides the theoretical foundation for the certification program. It is the Consultants' understanding that many Filipino health professionals do not have a good understanding of the principles of quality assurance and quality improvement.

Once the trainee surveyors have been introduced to the standards and criteria this should be followed by a simulated survey exercise. This helps reinforce the lessons learnt and provides 'practical' experience to assist recall later.

Teaching aids and material, including a surveyor's guidebook, will need to be developed and printed. The documentation must be designed to assist reinforce the material presented during the training program. The goal of the documentation is to assist the surveyors undertake their work consistently and to the requirements of the certification organization.

As with any training exercise, the induction-training program should be comprehensively evaluated to develop an understanding of the limitations of the training program. Evaluation

[22] Bohigas L, Smith DA, et al. A comparative analysis of surveyors from six hospital accreditation programmes and a consideration of the related management issues. *Int J Qual Health Care* 1998; 1: 7-13.
[23] International Society for Quality in Health Care (ISQua). *International Standards for Health Care Accreditation Bodies*, May 2000. [http://www.isqua.org.au].

should occur at the conclusion of the training and again after the surveyors have completed a number of surveys. The latter information provides a better insight into the usefulness of the induction-training program. Using all of the evaluation information, the next induction-training program should be modified and improved.

Recommendation 34. An induction-training program should be developed based on the ISQua criteria and the program should be routinely evaluated for effectiveness.

On-Going Training and Education

Once standards are developed and implemented there has to be an acceptance that, with advancements in knowledge and service delivery, the standards will require review and revision. Similarly, with experience the process of certification will require review and revision.

The certification organization will need to establish a system for subsequent training for the surveyors. The training program should be based on the identified and prioritized training needs of the surveyors and changes in the standards and certification process.

The training needs should be identified by:
- routine commissioned feedback from the surveyors at the conclusion of each survey visit;
- data on surveyor performance;
- data on problematic standards and criteria or problematic situations;
- new or revised standards and criteria or evaluation methodologies.

To maintain currency of knowledge and skills, surveyors should be expected to attend a 'refresher' one-day training program every two years.

Deployment

The certification surveyors need to be assigned their tasks in a programmed way. They will need to have adequate notification of any forthcoming surveys. Surveys need to be booked in clusters to minimize costs and inconvenience of long distance travel.

Documentation needs to be dispatched to the surveyors with enough time to allow them to review the self-assessment and any supporting documents from the TB DOTS center. Back-up arrangements must be in place to fill 'short notice', unplanned cancellations by surveyors.

The deployment of the surveyors needs to be monitored to ensure undue loads are not placed on a few and others do too few surveys.

Performance Management

As previously stated, the certification surveyors are the ambassadors of the certification organization. Their performance is critical to the success of the certification organization. Performance improvement requires performance evaluation.[24] The performance of the surveyors should be evaluated by TB DOTS centers, by the other member of the survey team, and by other 'customers' such as certification organization support and professional staff. Regular and timely feedback should be passed back to the surveyors to identify training needs, recognise good performance and assist with performance improvement. The ongoing competence of each surveyor should be reviewed at regular intervals based on the evaluations

[24] Mozena JP. Anderson DL. Quality improvement handbook for health care professionals. Milwaukee, Wis: ASQC Quality Press, 1993.

received. This is particularly important for certification surveyors who have left active work within health services.

At the end of the term of appointment, surveyors should only be re-appointed based on demonstrated competence and other criteria to be determined by the certification organization (for example, participation in continuing training, completing a number of surveys in a period, *et cetera*). It is imperative that there is a system to ensure current competence and credibility. The certification organization must develop and implement a formal evaluation system for certification surveyors.

Occupational Health and Safety

Owing to the isolated, and occasionally even insular, nature of the TB DOTS centers scattered throughout the Islands, the training of surveyors must include the use of precautionary measures while in deployment. The safety of the surveyors while travelling and lodging in distant centers, particularly those with precarious peace and order situations, must be safeguarded by the certification organization. Even while in highly urbanized areas, surveyors must keep in mind that they may be unfamiliar to the place and must be cautioned on standard safety protocols.

The certification organization will be required to take out appropriate insurance cover to minimize the risk exposure of the organization and to safeguard the interests of the surveyors.

STAFF

Most certification organizations require a paid core of professional and non-professional staff to manage the certification program. Some do exist wholly as voluntary organisations (associations).

The TB DOTS center certification process is relatively simple compared to many other programs of certification and accreditation. The tasks to be managed will include stakeholder relations, marketing, education, survey scheduling, surveyor recruitment, training and deployment, certification assessment, standards maintenance and development and internal quality assurance.

Recruitment

There is an obvious correlation between the number of TB DOTS centers to be surveyed and the number of staff required.

The governing body will need to regularly monitor the growth of the certification program and establish criteria for additional recruitment.

Selection

The initial selection of professional staff should follow open advertisement outlining the tasks, the commitments and the criteria for appointment.

A range of skills will be required. The basic competencies needed to manage a TB DOTS center certification program are:

- A thorough understanding of quality assurance and improvement principles
- An understanding of the role of certification in quality assurance
- A basic understanding of TB DOTS methodology
- Business management skills including leadership skills, supervisory skills, an ability to create cohesive teamwork, an understanding of proper human resource practices, an

understanding of systems and processes, negotiation and conflict resolution skills and effective communication skills
- Training and education skills
- Marketing and customer focus skills
- Financial management skills

In the early development of the certification organization, staff will need to be multi-skilled. Responsibilities will need to overlap to ensure continuity of service provision in times of staff absence or attention to other specific tasks (e.g., training). Effective communication between staff will be a critical success factor for the fledgling certification organization.

International experience suggests that a health background is essential to provide the right focus for the multiple competencies required for the certification organization. Nurses are the most likely professional group that will have the background and skills necessary to manage the certification program.

The professional staff will require the support of an administrative assistant. As the number of surveys grows, additional professional staff would be required. Once a critical mass was achieved, staff could be assigned specialized duties based on special competencies. Examples would be training and education becoming the sole responsibility of one professional staff member, albeit with assistance from the others. Similarly, marketing could become a specialized skill area.

The selection criteria should be based on the necessary skills and competencies. A proposal for the set of core competencies has been provided. A transparent selection process must then be developed to apply the selection criteria fairly to ensure the best available people are selected.

Terms of Engagement

The responsibilities and expectations of the professional and administrative staff should be clearly defined and agreed with applicants prior to appointment. These can be outlined in a role statement or position description.

Training and Development

Induction Training for the Surveyor Workforce

As for the surveyors, induction training is critical and although the focus may be slightly different, the induction training should include:
- mission, values and strategic directions of the certification organization;
- the organization, rules and processes of the certification organization;
- legal and certification requirements;
- certification standards and criteria and their interpretation;
- evaluation procedure skills, including report requirements;
- performance expectations and evaluation systems; and
- strategies to continually improve the quality of the certification program.

The new staff should evaluate the induction-training program.

On-Going Training and Education

The professional staff is the 'backbone' of the certification organization. They must be encouraged and supported in continuous professional development.

Performance Management

The performance of the professional staff is critical to the success of the certification organization. Performance improvement requires performance evaluation. Systems to provide regular and timely feedback should be established.

MARKETS, MARKETING AND COMMUNICATIONS

This section of the report addresses a number of important issues. Many of the issues identified and reported upon in the following section were used to understand the potential market for certification and, consequently, had a major impact on the final options. The analysis of the market is combined with marketing in the following discussion. For the purposes of this report, the Consultants defined marketing as the strategies to recruit and sustain certified TB DOTS centers from the pool of potential providers. Communication has been defined as the strategies for selecting the formats and contents of messages to improve provider compliance of certified providers to the national TB guidelines and to the PhilCAT quality standards.

MARKETS AND MARKETING

The TB DOTS Outpatient Benefit Package as a Product

Encouraging investment in a TB DOTS center requires building the case for creating a new facility whose prime function is to provide TB DOTS in return for the PhilHealth TB DOTS Outpatient Benefit Package. From the point of view of the provider market, the PhilHealth package can be seen as a product whose cost is PhilCAT certification. However, since certification is based on achievement of quality standards, it follows that the real cost of the benefit package is the establishment of quality systems within the TB DOTS center. It is for this reason that PhilHealth favors a measured rate of replicating the centers over unbridled proliferation of facilities that recall the early Medicare days.[25]

A PhilHealth accredited TB DOTS center must be known for the quality of its services. Such a relatively stringent standard has important implications for the levels of access and acceptance of the centers. Thus, both product and provider of the product must be marketed in a way that ensures the number of centers multiply without sacrificing quality.

A Demand and Supply Approach to Marketing

The table below shows the 'demand' side (reflecting acceptance) and 'supply' side (reflecting accessibility) of the package that should be addressed by any strategy to promote and sustain its implementation.[26] Every TB DOTS Center is required to address the essential structure and performance issues needed for the effective delivery of DOTS.

To sell this product to providers, its value should be seen as worth the time and effort of undergoing the certification process. Increasing its value involves enhancing its perceived benefits, both financial and intangible. These will include such inputs as packaging training and technical assistance with the certification award, providing access to other certification by-products such as information materials, flyers and personalized support services, and ensuring uninterrupted drug supply and regular PhilHealth reimbursements to the centers. In turn, PhilHealth payments assure a steady flow of these required inputs into the centers. The number of accredited TB DOTS centers is dependent on the availability of the inputs required for them

[25] Valera M, Vice President, Quality Assurance Research and Policy Development Group, Philippine Health Insurance Corporation. Personal communications.
[26] Berman P. Supply-side approaches to optimizing private health sector growth. From Private Health Sector Growth in Asia: Issues and Implications. Edited by W. Newbander. John Wiley & Sons, Ltd., 1997.

to achieve the quality certification standards developed by PhilCAT. PhilCAT certification, public recognition of the certified centers and public citations of providers further increase its net worth, attract partners and ensure institutional viability. This addresses the supply side of the benefit package.

On the other hand, increasing public demand for the product involves information, education and communication campaigns to pique public interest and gain the confidence and trust of the providers. Because access to the product is gained only through certified TB DOTS centers, publicly promoting and highlighting the quality of the certified centers, encouraging the public to patronize only the certified centers and to expect other facilities to follow suit also addresses the demand for the product. Marketing and communication is an important intervention, albeit one of many, for stimulating and sustaining demand for the high quality delivery of the product through the TB DOTS centers. Although the immediate target would be potential TB DOTS centers and health professionals, the certification organization would do well to target other stakeholders such as consumer groups, local governments and professional societies to create a ground swell of support for the centers. This requires the use of multiple approaches and packaging directed at specific segments of users and investors. Finally, since proof of quality is the best marketing tool, the certification organization should ensure that certified TB DOTS centers are in fact known for the quality of its services.

Table 1. Demand and supply sides of the PhilHealth TB DOTS Outpatient Benefit Package (Adapted from Griffin et al, 1994) [27]

Demand		**Product The PhilHealth TB DOTS Outpatient Benefit Package**	**Supply**	
Sustaining elements	**Possible interventions**	**Producer: TB DOTS Centers**	**Possible interventions**	**Required inputs**
Multisectoral buy-in tot DOTS	Social marketing	**Structure and performance issues**	PhilCAT certification	PhilHealth payments
Replicated Centers	IEC	Sputum microscopy	Quality control systems	Equipment and supplies
Publications	Consumer groups	Drug stocks	Bulk procurement	Anti-TB drugs
Community subsidies	Local government pressure	Diagnostic committees	Peer review and audit mechanisms	Manpower
NGO support	Medical society partnerships	Provider training	PhilCAT training	Referral networks
Donor agency funding	Advocacy	Provider compliance	PhilCAT monitoring	Physical space

[27] Griffin C et al. The private medical sector in the Philippines. The current situation and prospects for change. HFDP Monograph No. 4. USAID, April 1994.

Out of pocket application fees	Private provider detailing	DOTS partner selection		Financial capital
Global Fund for TB	National guidelines	Patient compliance	Patient training	Infrastructure
	Sentrong Sigla integration	Managerial and accounting skills	Managerial skills enhancement	Local PhilCAT network
		Networking		

Marketing for Sustainability

The importance of marketing and networking is underscored by two other realities. First, TB DOTS is well ensconced in the public sector through active advocacy by the Department of Health of the National Tuberculosis Control Program guidelines.[28] The certification organization should take pains to ensure that the standards and processes of the certification program directed at the private sector harmonize with those of the Department of Health, particularly with respect to the *Sentrong Sigla* movement. This avoids systematic variations in treatment approaches to TB. It will also preempt private providers' complaints that they are being unfairly burdened by stricter standards and higher fees. Second, given the enormous resources needed to establish and run a certification organization (see Cost of Certification below), and the uncertainty of continuing donor funds, the certification organization must create an irreversible demand for TB DOTS centers from local consumers, investors and government units.

The TB DOTS Outpatient Package Market

Potential TB DOTS centers include the following medical providers:

- stand-alone ambulatory clinics
- clinics within hospitals
- clinics within non-medical facilities, such as schools, factories and other workplaces, malls and churches

These potential centers have their own peculiar organizational and management structures, financing, revenue sources, manpower mix, and patient mix.

For example, hospitals that have allocated resources for TB DOTS provision are at the moment second referral level private facilities with well-stocked pharmacies, more than adequate laboratory facilities and a large network of referring physicians. These Centers are in Sto Tomas University Hospital, Makati Medical Center and De La Salle University Medical Center. Smaller hospitals and infirmaries may have the same resources, though in a smaller scale, and should be able to sustain TB DOTS centers in their initial phase of operations. These buffer resources may also shield the centers from the risks of delayed or non-payment (should patients default) by PhilHealth. TB drugs may be included in larger bulk purchases by the hospital thus assuring better deals with drug companies. Manpower and utilities may be shouldered by the hospital.

On the other hand, second referral government hospitals may have fewer 'buffer' resources to absorb losses or delayed payments. They may also have less flexible administrative systems and financial procedures, constrained by the rules of the Commission on Audit and the

[28] Awiten F, Regional Director, Center for Health and Development Caraga. Personal communication.

Department of Budget and Management. The first referral hospitals and infirmaries, being administered by the local government units, have to contend with varying degrees of fiscal and managerial autonomies.

PhilHealth may have to be more flexible in offering the terms and conditions of the TB DOTS package to these different types of hospitals. Consequently, the marketing and communications strategies will also have to be suitably modified to appeal to these hospitals' needs and concerns.

Stand-alone ambulatory clinics, depending on their size and complexity, may have facilities of varying adequacy and have smaller patient loads and revenue generating potentials. This translates to greater vulnerability to financial risks. The marginal costs of adding a TB DOTS service to the existing clinical services will be higher and will have relatively greater administrative and financial impacts compared to those of hospitals.

Clinics within non-medical facilities are a hybrid. Resources will tend to be limited, although the potential for being subsidized by a 'parent' organization is high.

The Size of the Market

There were 1793 licensed hospitals in 1999.[29] Figure 1 shows that most hospitals are in regions 3 (Central Luzon), 4 (Southern Luzon) and the National Capital Region and majority of these hospitals are privately owned. Private hospitals also predominate in regions 1 (Ilocos) and 5 (Bicol) in Luzon and in regions 10 (Northern Mindanao), 11 (Southern Mindanao) and 12 (Western Mindanao). The supply of hospitals, and consequently that of hospital-based TB DOTS centers, is lowest in the Cordillera Autonomous Region.

Figure 1. Distribution of hospitals by region and ownership

[29] Data provided by Bureau of Health Facilities and Services.

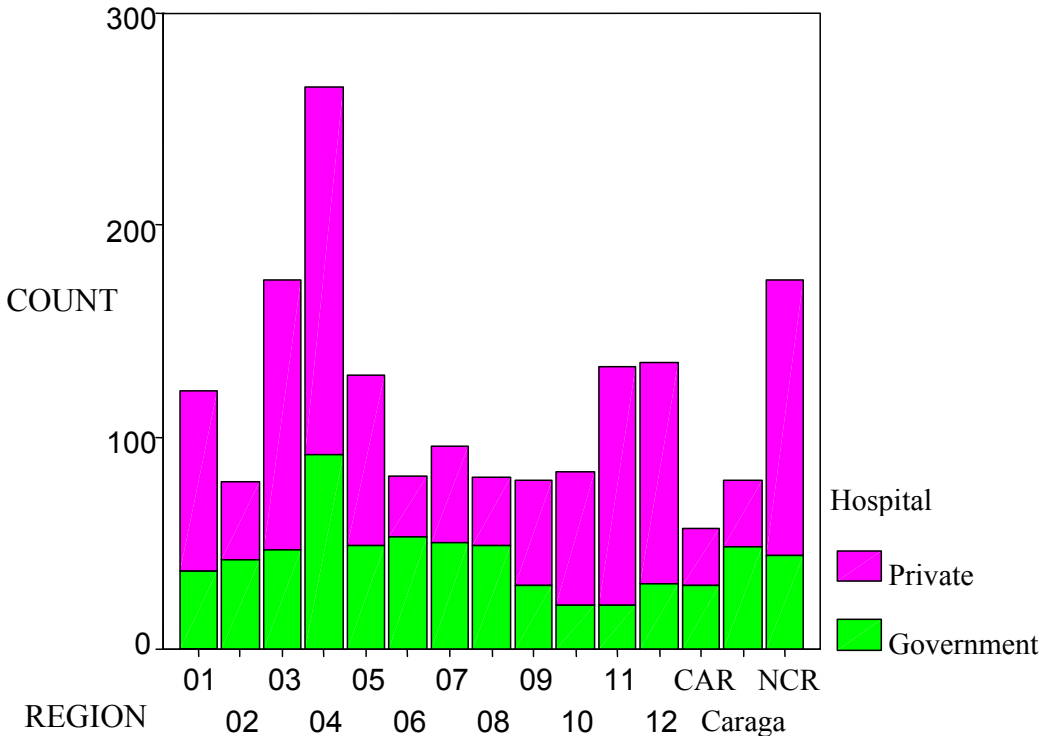
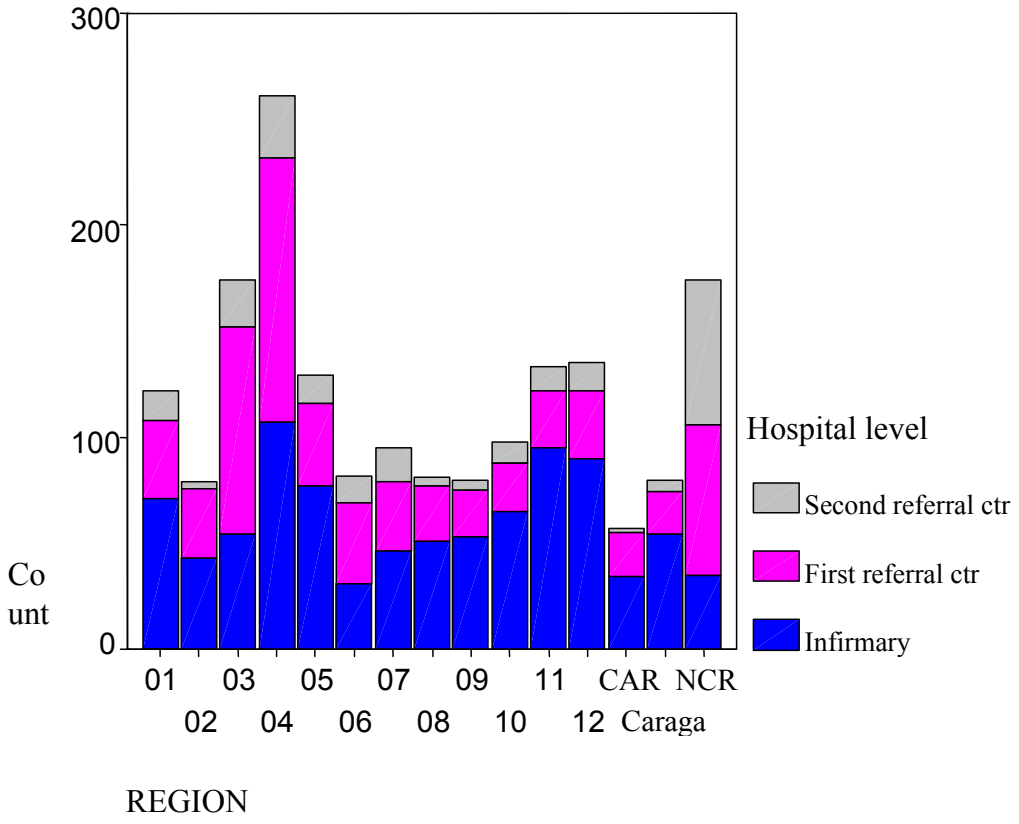


Figure 2 shows that, except for regions 3 (Central Luzon), 4 (Southern Luzon) and the National Capital Region, infirmaries predominate the first and second referral centers in all regions. This suggests that structural inputs may be less than adequate in most parts of the Philippines except for the highly urbanized areas in Luzon.

Marketing and communication strategies for the hospitals may consider prioritizing regions 4, 5 and NCR where the concentration of private hospitals is highest and where most hospitals are first or second referral levels. These hospitals may have a higher likelihood of establishing and sustaining TB DOTS centers. The possibility of linking small private clinics as 'satellite' DOTS centers of big private hospitals that have adequate laboratory and pharmacy resources in these regions should be explored. Being purely private institutions with no access to government subsidies, however, these private facilities might find the PhilHealth flat rate of 4,000 pesos too small a remuneration for them to break even. This concern has been aired by several private hospital owners.[30]

Figure 2. Distribution of hospitals by region and hospital level

[30] Cruz T, Director, Mary Immaculate Hospital, Pasig City; Montillano F, Owner, Montillano Clinics, Alabang, Las Pinas, and San Pedro; Crisostomo C, Chairman, Board of Directors, and owner, Our Lady of the Pillar Hospital, Imus, Cavite; Estrellado E, Member, Board of Directors, Molino Doctors Hospital, Bacoor, Cavite. Personal communication.



Determining Market Demographics and Segments

Interviews with owners of four hospitals (three of whom are physicians) and clinician-proprietors of three private clinics further emphasize the need to pay careful attention to the methods for defining the market for the TB DOTS package and its accompanying certification program. The demographic characteristics of the different potential centers should be determined. Initial implementation of the program should strategically target the centers that are most likely to accept the package and to be willing to undergo certification. The prototype class of 'early acceptors' must be characterized in terms of organizational size, ownership, sources of revenue, patterns of expenditure, manpower, technical facilities, offered services, patient volumes, socioeconomic classes and mix.

Within this class of early acceptors, potential centers may be clustered into discrete groups of clinics that have similarities in terms of needs for current growth and future survival, ownership, sources of income and socioeconomic characteristics of patients. This will help clarify the feasibility of adding TB DOTS to their current range of services.

Current Behavior of Private Providers

Erratic compliance to the National Tuberculosis Control Program guidelines is the usual behavior attributed to TB DOTS providers.[31] This is corroborated by research. A 1998 cross sectional survey of 214 family physicians using mailed questionnaires showed more than 100

[31] Bonoan, T, Regional Director, Center for Health and Development CAR; Nieto E, Regional Director, Center for Health and Development IV; Bacus M, Regional Director, Center for Health and Development VIII. Personal communications

variations in dosage and duration of TB drug administration. 30% used chest X-ray routinely and sputum examination when necessary. 13% provided DOTS.[32] A survey of 833 purposively sampled physicians of whom 44% were private yielded similar results. Usage of the DOH TB guidelines ranged from 17% to 27% among private physicians and 20% to 33% among government physicians. Private physicians, compared with government physicians, ordered sputum smears less frequently (50% vs 68%), favored chest X-rays more (86% vs 64%), and recommended DOTS less (32% vs 46%).[33]

Problems in Regulating Provider Behavior

That the PhilHealth TB DOTS Outpatient Benefit Package represents a significant departure from the usual mode of PhilHealth payment can not be over emphasized. PhilHealth's system of reimbursing claims based on the costs of the items used and the actual procedures done while maintaining maximum ceilings on all charges have resulted in incentives to physicians to increase the quantity of services and items up to the maximum. Patients end up significantly co-paying for charges beyond the ceilings.[34] The 4,000 peso flat rate represents total payment based on the provision of care for a specific condition, disallows extra charges on the patients and thus eliminates co payment. By transferring the risk of incurring extra costs from excess or low quality care from the patients to the providers, PhilHealth is, in effect, initiating a change in provider behavior. Controlling costs rather than maximizing charges would be the only option for providers to benefit from the flat rate. Profit margins can only be safeguarded by providers that push the costs of drugs, laboratory tests and clinician fees to the minimum. This idea must be 'sold' as well when advocating the TB DOTS package. Individual professionals may find this option unappealing although enterprising facilities may be challenged by this novel opportunity to generating income from outpatient services.

Private Provider Awareness of TB DOTS

Private physicians compared with government physicians, tended to be less aware of the national TB guidelines (29% vs 35%). Paradoxically, familiarity with DOTS was high for both groups of physicians although less so among the private group (70% vs 77%). In a separate survey among 31 industrial physicians in Cavite, chest X-rays were deemed more convenient to do, facilities were more accessible and patients found it more comfortable to undergo. Sputum microscopy was considered unreliable and not as readily accessible. They also pointed out that majority of TB cases were asymptomatic and could not expectorate adequately. 97% were aware of nearby local health centers and the availability of free drugs and laboratory tests. 87% actually referred patients to them. When asked for the reasons for non-referral, these physicians said that they preferred to treat their patients themselves, that patients could afford and actually preferred branded drugs, that anti-TB drugs from local health centers were inferior and that the company provided the tests and drugs anyway. 87% were aware of DOTS and 74% claimed practicing it. Reasons for non-practice included perceived lack of effectiveness of DOTS, lack of staff, lack of free drugs, difficult implementation, patient's unwillingness to visit daily, conflicting company policies and technical feasibility of DOTS.[35]

Private Provider Awareness of PhilCAT and the PhilHealth Outpatient Benefit Package

There is very little awareness of PhilCAT among the interviewed private hospital and clinic owners and administrators. Because the PhilHealth TB DOTS Outpatient Benefit Package was

[32] Manalo et al. Knowledge, attitudes and practices for TB among Filipino family physicians. 1998 (unpublished)
[33] Baseline Surveys for the National Objectives for Health (BSNOH), 2000 (in print).
[34] Solon O et al. Insurance and price discrimination in the market for hospital services in the Philippines. Paper presented at the Asian Development BANK. First Regional Conference on Health Sector Reform in Asia, May 22-25, 1995, Manila.
[35] Dalay. TB practices of industrial physicians in Cavite. 2002 (unpublished).

announced only less than 3 months ago (PhilHealth Circular no. 19 on May 21, 2003), no key informant was familiar with its benefits and requirements.[36] On the other hand, all of the informants were aware of TB DOTS. One private hospital owner was personally informed by the doctors in the City Health Office of Muntinlupa.[37] All informants were concerned with the feasibility of having patients report daily to the DOTS center or to a treatment partner. Identifying treatment partners was also expected to be difficult. One said that it is the lack of money to buy drugs rather than compliance with regular intake that deters people from completing the six-month regimen.[38]

None of the informants are sure that the 4,000 peso flat rate could actually cover sputum smear, drugs for six months, professional fees for 6 visits, clinic utilities and other incidental expenses. The cost of drugs was singled out as the largest expense. If these were provided free to them, it may be possible for private facilities to make a little profit from the PhilHealth package.[39] They were also worried that if patients default, they risk not being paid in full. All of the informants would conduct a feasibility study first before applying for certification.

When informed of the essential elements of the certification standards, all of the informants felt that they would readily achieve them and be certified by PhilCAT. All felt that providing DOTS service to TB patients would be a good way of expanding their clinical services. None considered having TB patients flock to their facility as a form of stigmatizing publicity.

The informants considered about ten thousand pesos as an acceptable certification fee.

Provider Views on PhilHealth Policies

Four of the hospital owners and administrators aired negative views about PhilHealth's policies. The complaints were common to all four and concerned the three main areas:

1. Denial of claims because of wrong ICD 10 codes. Informants claimed that PhilHealth never corrected their codes during the grace period. They thus assumed that they were assigning correct codes only to have their claims denied afterwards. One informant suggested that PhilHealth should just give the right codes for specific diseases and procedures to the hospitals.
2. PhilHealth's requirements were seen to be inconsistent and arbitrary. Informants claimed that PhilHealth representatives would sometimes assure them that the required documents are satisfactory only to be informed later that some forms are lacking at which time the patients would already be discharged. This greatly slows down the processing of claims.
3. Accreditation visits are announced a day or two before the actual visit giving little opportunity for facilities to adequately prepare themselves.

These views need to be considered when designing the format and content of the communications materials. An assurance of regular and prompt payments once centers are certified should be highlighted. The forms and data requirements for the reimbursement process need to be standardized to minimize non-compliance and errors in accomplishing them.

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[36] Cruz T, Director, Mary Immaculate Hospital, Pasig City; Mr. Montillano F, Owner, Montillano Clinics, Alabang, Las Pinas, and San Pedro; Crisostomo C, Chairman, Board of Directors, and owner, Our Lady of the Pillar Hospital, Imus, Cavite; Estrellado E, Member, Board of Directors, Molino Doctors Hospital, Bacoor, Cavite; Marbidi M, general practitioner and clinic owner, TS Cruz Clinic, Las Pinas; Saulog E, general practitioner and clinic owner, Imus, Cavite. Personal communication.
[37] Montillano F., owner, Montillano Clinics, Alabang, Las Pinas, and San Pedro. Personal communications.
[38] Cruz T, Director, Mary Immaculate Hospital, Pasig City. Personal communications.
[39] Crisostomo C, Chairman, Board of Directors, and owner, Our Lady of the Pillar Hospital, Imus, Cavite. Personal communications

Approaches to Complement Marketing and Communications Strategies

There are many approaches to introducing change and improving clinical performance and these should be integrated in the marketing and communications strategies. Since the PhilHealth package will be delivered in an environment marked by high quality care, prospective TB DOTS Centers should be attracted not just by the possibility of generating revenues from the package but also by the opportunity to align clinical practice with evidence of effectiveness. The following approaches should be considered for inclusion in the design of the information, education and communication (IEC) tools:

Educational approach

This approach focuses on the intrinsic motivation of professionals to strive for competence and includes promoting learning from experience, problem-based learning, small-group discussion and local consensus processes. It aims at giving the target group the feeling of 'owning' the change process. Assuring access of certified TB DOTS centers to continuing medical training will improve performance and add value to the certification award.

Epidemiological approach

This approach assumes that humans are rational beings who base their decisions on a balance of rational arguments about costs, benefits and harms. Strategies based on this approach include the development and dissemination of evidence-based clinical practice guidelines and decision-making tools. Disseminating the National Tuberculosis Guidelines / PhilCAT guidelines and developing clinical reminders, clinical pathways, algorithms and flyers based on these guidelines can be done to reinforce guideline dissemination and encourage compliance.

Social influence approach

This approach emphasizes that learning and changing is often achieved as a result of the influence of and interactions within social networks. Using the opinions, feedback and pressure from significant individuals within PhilCAT or PhilHealth will greatly hasten information dissemination and acceptance of the certification process. Patient-mediated interventions will also aid in promoting the value of quality within the TB DOTS centers.

Organizational approach

This approach focuses on system-wide factors and conditions that influence individual behavior and emphasizes the role of total quality management in improving clinical performance. PhilCAT may package the TB DOTS center with training opportunities for quality improvement that can then attract both private investors and patients.

Effective Communication Strategies to Reach the Provider Market

After selecting provider behaviors and perceptions that need to be changed, communication strategies that are appropriate to these target behaviors and perceptions must be selected. In selecting communication strategies, communicators should consider whether the absence or incorrect performance of a target behavior is due to a lack of skills or the absence of conditions favorable for performing it.[40] The lack of awareness and skills in providing DOTS to TB patients indicate that significant knowledge transfer and skills training programs should be conducted to address the skill deficits of private providers.

[40] Graeff J et al. Communication for health and behavior change. A developing country perspective. San Francisco: Josey-Bass Inc., Publishers, 1993.

Training programs should consider the evidence for effective educational formats and the principles of adult learning. Information delivered in discrete, clinically applicable messages in small group sessions that allow dynamic interactions among learners and educators are to be preferred to conventional didactic classroom lectures. The acquisition of target knowledge and skills should be monitored and reviewed. Educational programs should be flexible enough to allow appropriate re-training or speeding up depending on the pace at which the target behaviors are being demonstrated. Once approximations of the target behaviors are seen (e.g., TB patients are being initiated into the DOTS protocol but inconsistently so), these should be promptly rewarded, reinforced and 'polished' until the correct behaviors are being reliably performed.

In other cases, the level of provider knowledge and skill is already high but performance may still suffer from lack of predisposing or reinforcing conditions within the health care environment. This may be the case in which patient volumes and multiple tasks prevent health workers from devoting sufficient time to engage TB patients in effective DOTS management. Other system issues such as lack of reliable sputum microscopists or inadequate course-long drug supplies can discourage health workers from consistently providing DOTS. Faltering demand and support for DOTS may also contribute to performance attrition. The certification program has the potential to address performance deficits by rewarding and supporting system-wide continuous quality improvement. Recognition of TB DOTS centers and the provision of regular re-training can be powerful stimuli for sustained DOTS provision and high compliance among both patients and health workers.

Content and Formats of Information, Education and Communication (IEC) Materials

The content of IEC materials depends on whether they address skills or performance deficits. A formal assessment of the educational needs of the staff of the centers must be conducted to validate appropriateness of training materials. In general terms, the provision of knowledge and skills fall into the following two main areas:

1. Understanding and managing their TB DOTS program
   IEC materials in this category must contain much of the teaching materials that have been developed by PhilCAT for public dissemination. These materials cover the National Tuberculosis Control Program / PhilCAT guidelines, the principles of DOTS provision, the information requirements of running the TB DOTS program, the principles and procedures of performing sputum microscopy and PPD skin testing and interpreting their results, and the pharmacological principles underlying antituberculous drugs administration. The principles and practice of patient management, building therapeutic partnerships, identifying DOTS partners and encouraging compliance and completion of therapy are also included. Finally, information on the requirements and benefits covered by the PhilHealth TB DOTS Outpatient Benefit Package, the warranties of accreditation and the documentary requirements should be covered. Topics taken up during training workshops given by PhilCAT and other expert groups may be accumulated prospectively.

2. Understanding and managing their TB DOTS certification
   IEC materials in this category must contain information on the certification program, the procedures and requirements leading to the certification survey, the purpose and structure of the certification surveys, the certification standards, their goals, interpretation and the possible certification decisions consequent to the survey, avenues for appeals, duration of certification and post-certification requirements.

The formats of the IEC materials must fully exploit the media habits of its target users. Depending on its intended audience, electronic and paper copies of IEC materials may be in the form of:

- Full length technical reports
- Patient versions
- Self-instructional modules
- Clinical reminders and flyers
- Algorithms and pathways
- Sound 'bites' and 'blurbs'
- Advertisements

Some of these information resources would be appropriate for medical readers although a number of materials for general public consumption must necessarily be provided given that the current level of awareness of TB DOTS, the PhilHealth package and the certification program is low.

In addition, information to appraise current and potential investors and stakeholders to the certification program has to be released on at least a yearly basis. Such reports detail the growth of the certification program against certification targets, some indication of the financial status of the certification organization and the corporate structure, officers and program highlights of the certification organization.

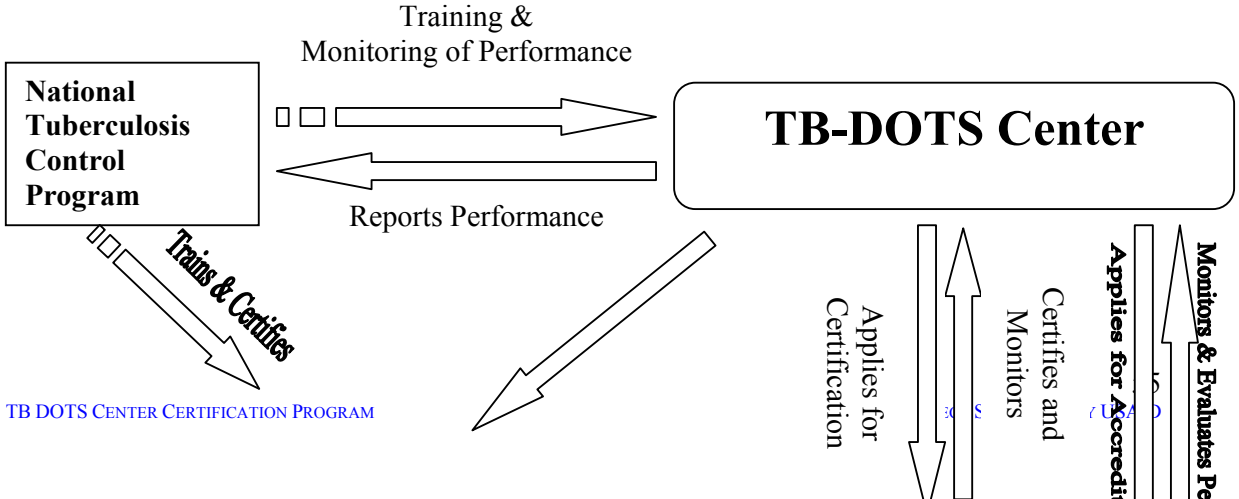
INFORMATION AND DATA REQUIREMENTS

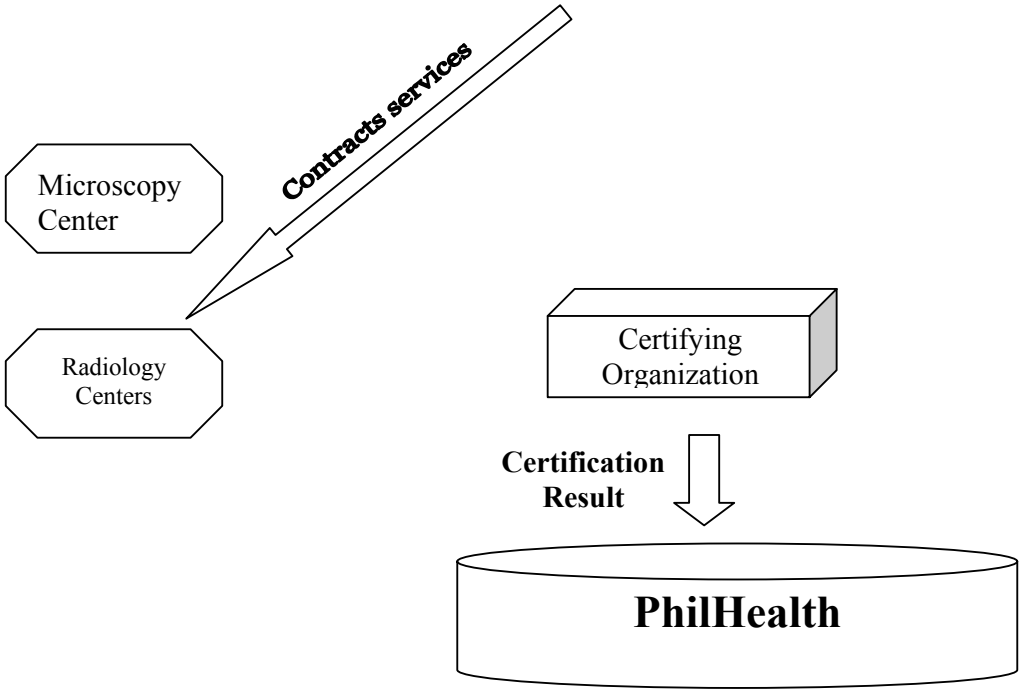
This section describes the data requirements of a number of inter-related processes. TB-DOTS center certification and accreditation are directly linked. The certification of TB DOTS centers is a process requiring many steps and interactions. Quality improvement in TB DOTS center performance necessarily requires data from the certification and accreditation processes. Improvement in the national approach to TB management also requires data and the certification process must feed data into that quality improvement process.

For ease of description in the report, the many inter-related sets of data can be tabulated as follows:

- Data to prepare a TB DOTS center for certification and accreditation
- Data for the management of the certification process including data for internal quality assurance systems within the certification organization
- Data for certification decisions
- Data for PhilHealth accreditation decisions
- Data for quality improvement in TB DOTS provision by TB DOTS centers
- Data for management of the National Tuberculosis Control Program

The following diagram provides an overview of the inter-relationships of the data sets.





The collection and manipulation of any data is expensive, particularly if there are limited opportunities to automate the collection and delivery. Additionally, paper-based forms and data entry into automated systems at a later time often leads to data error. Data that has no apparent use to the creator of the data is often collected in haphazard ways, again leading to data integrity problems. To improve integrity problems, wherever possible, data should be limited to data that is a by-product of normal operational process such as the provision of care in a TB DOTS center or the necessary processes of certification.

Within the context of this report, the purpose of defining data requirements is to identify the data sets, and the data elements of those sets, required to create meaningful information for decision-making.

DATA FOR THE CERTIFICATION PROCESS AND CERTIFICATION DECISIONS

A range of data is required for the management of the certification process and various data elements are related to each of the key steps in the certification process.

The certification organisation requirements checklist:

- Application form accompanied by a non-refundable certification fee
- National Tuberculosis Control Program requirements
- PhilHealth requirements
- Department of Health license for centers with radiology services
- Department of Health license for centers with laboratory services beyond TB microscopy
- Accomplished self-assessment tool
- Certification survey report

It is worthy to note that the results of the self-assessment and the certification survey report will generate two sets of data based on the same standards and criteria. The clusters of standards for certification will determine the structure of the database. Each standard within a cluster is supported by criteria and each criterion may be satisfied by a list of potential indicators. This hierarchy of information must be preserved in the database.

In addition, because three distinct but related activities (document review, observations, and key informant interviews) will be undertaken by surveyors in determining compliance to the standards, the database should be able to distinguish information generated by each survey

method if there is disagreement on the final rating. This may be too complex for initial consideration.

The certification organization will need a way of consolidating all of the relevant sources of data and a way of gaining a single view of the data from different dimensions, including by individual TB DOTS centers, by the whole TB DOTS center market, by geography, *et cetera*. Analytics address this challenge, providing the certification organization with the single version of the 'truth' from multiple sources and perspectives.

Data is generated in each of the steps of the certification process. As certification unfolds, each TB center applicant's record should concurrently accumulate critical pieces of information that can then be used to track the progress of certification, assess the extent to which it complies with the required processes at each stage and back-track, if needed, to review the bases for the decisions in each stage.

Certification process	**Information generated**
Entry into the certification program	
Informed decision	Signed contract of agreement between certifying organization and TB DOTS center
Eligibility criteria	Checklist of eligibility criteria with required forms and proofs of compliance appended
Self-assessment	▪ Self assessment tool with users' guides ▪ Certification standards with examples of acceptable indicators ▪ Guidance for the interpretation of the certification standards ▪ Service contracts with training consultants ▪ Service contracts ▪ Accomplished self-assessment tool with attachments ▪ Checklist of appraisal criteria of self-assessment tool ▪ Proof of compliance with appraisal criteria ▪ Official communication of satisfactory compliance with self-assessment requirements
Compliance with relevant provisions of the certification program	▪ Waivers of privacy, liability ▪ PhilHealth clearance from utilization review division ▪ Proof of payment of certification fees
Arrangements for the survey	▪ Notice of date, time and duration of survey with detailed plan ▪ Specification of the nature and extent of the survey ▪ Guide to the general rules and procedures of the survey ▪ Checklist of documents to be prepared ▪ Identities of interviewees ▪ Criteria for surveyors ▪ Identities of designated surveyors
Conduct of on-site certification survey	
Interviews of personnel and patients	Interview schedules
Document reviews	Document review checklists
Observation of key processes	Observation forms with comments
Ratings and interpretation of	Completed survey forms with ratings and comments

standards	
Exit conference	Minutes of exit conference with key issues highlighted
Post survey	
Report structure	Survey report with summary recommendations
Rating	Summary of ratings
Certification decision	▪ Minutes of deliberations of certification decision-making committee with key issues and decisions made ▪ Decision rules ▪ Formulation of certification outcome ▪ Notice of certification outcome ▪ Notice of deficiencies ▪ Certification award ▪ Endorsement to PhilHealth
Appeals	▪ Letter of appeal ▪ Actions taken by certification committee ▪ Minutes of committee deliberations ▪ Committee decisions

In the document review portion of the certification survey, data for documenting and analyzing the quality of processes and outcomes of care can be extracted from the following Department of Health clinical forms that are routinely maintained in the center:

- NTP Laboratory Request Form for Sputum Examination
- NTP Laboratory Register
- NTP Treatment Card
- NTP Identification Card
- TB Register
- NTP Referral/Transfer Form
- Aggregated Report of Laboratory Activities
- Aggregated Report of Cases by type (e.g., new, relapse, failure, etc)
- Drug Inventory
- Aggregated Report of Treatment Outcome

DATABASES FOR MANAGING THE CERTIFICATION PROCESS

Information generated by the certification process can be viewed based on critical management issues.

Evaluating Achievement of Program Targets

The first is the databank of all TB-DOTS centers that applied for certification. Using standard statistical measurements, the certification organization may monitor the percentages of the applicants that eventually get certified, accredited, re-certified and re-accredited. The rate of increase in the number of certified and accredited TB DOTS centers should be compared with pre-determined targets.

Status of certification can also be tracked during the various processes commencing with application through the numerous steps leading to certification to provide clients an up to date information of their application

Ideally, the proportion of certified TB DOTS centers among all private clinics should be taken as the measure by which the program has been accepted by the private sector. This may be

possible to calculate at the provincial or municipal level where the size of the target population can be estimated more accurately.

Maintaining the Integrity of the Certification Process

The rigor of the survey methods determines the accuracy and replication of the results. The extent to which surveyors were able to adhere to the survey protocol can be assessed by qualitatively reviewing the completed survey instruments for completeness of entries, appropriateness of choice of supporting evidence and adequacy of their supporting statements. Whether or not their final recommendations are supported by clear evidence can also be reviewed.

Minutes of the deliberations of the certification decision-making committee can be reviewed for adherence to pre-defined decision rules. Reviewing these minutes enable the determination of whether or not decisions were made based on clear evidence of achievement of the standards, clarifications from the surveyors were sought for ambiguous observations, and certification decisions were consistent from center to center.

Efficiency of the survey process

Documentation of the processes that accompany each of the key steps in the certification process from entry of applicant to issuance of the final certification decision, the duration of each step, and the center attrition rate at each step enable the identification of areas for improving the entire process. A comparison of the direct and indirect costs incurred during these key steps and the consequent outputs will help the certification organization streamline, simplify and optimize the use and deployment of resources during the entire process.

Effectiveness of Certification in Improving Quality

A main goal of certifying centers for PhilHealth accreditation is the identification of areas for quality improvement in the TB DOTS centers. One way of determining if this goal is being accomplished is to review the actions taken by applicant centers on the recommendations of the surveyors and if the deficiencies have in fact been addressed. For this purpose, the proportion of applicant centers that fail initial accreditation but that subsequently pass is an indicator of the effectiveness of certification as a quality improvement tool.

For monitoring purposes, the certifying organization must select a set of common critical indicators that will be used to compare certified TB DOTS centers with each other. The database of these indicators may be selected from the database of reports required by the Department of Health National Tuberculosis Control program. Information from the Department of Health 'pool' of routinely collected data could be used as a basis for assessing and monitoring performance of each certified center (See also Appendix F).

Training

A database on training should also be considered. This would be related to the TB DOTS center database by correlating the percentage of successful TB DOTS centers with the organisations or people that trained them. As an indirect databank of information, it would facilitate identifying which training institution would need additional training or which organisations would have to be de-listed or given commendations.

Surveyors

This is important for the successful operation of the certification organization. This will provide a bank of information of all surveyors in the field, including:

- where and when they were trained;
- numbers of surveys completed including where and when;
- analysis of ratings;
- performance assessments; and
- records of complaints and criticisms.

Accredited Microscopy and Radiology Clinics

Like the training database, this will provide a bank of information of all accredited allied service centers to facilitate the application process of new DOTS centers.

Marketing

Another major database that should be present in the organization is the marketing database. Operating with the objective of encouraging private sector participation in the TB-DOTS program, the certifying organization should know:

- TB prevalence rates to help the management team of the certifying organization determine the number of TB DOTS centers per locality. It could be linked to the Department of Health database (reports all certified TB DOTS centers in the country).
- Population statistics
- Number of providers per locality (nurses, microscopy laboratories, physicians, NGO health providers, private hospitals)
- Number and information of coalition members in certain areas

Tracking of communication with key stakeholders would also be important.

DATA FOR PHILHEALTH ACCREDITATION

Independent of the certification process, the applicant TB DOTS centers must still provide the following documents to PhilHealth to facilitate the accreditation process:

- PhilHealth application form properly accomplished and notarized
- Certification from PhilCAT
- Remittance Form I (RF-I)
- Proof of ownership of computer and Internet connection
- Proof of payment of P1,000 application fee

Although it is noted that there may be legal impediments, this process should be streamlined and combined with the certification process as far as possible to avoid duplication of effort by the TB DOTS center applicant.

The remaining accreditation requirements should be able to be accessed by PhilHealth from the TB DOTS centers' records. Electronic versions of the information must be preferred to enable speedy and safe transfer of information from the centers to PhilHealth.

- Certification from NTP as TB Microscopy Center
- Mayor's permit
- Complete list of staff with respective designations
- List of equipment and supplies
- List of available drugs and quantity in the DOTS Center
- Current photographs of DOTS Clinic façade and other facilities (optional)
- Current photographs of complete Clinic staff
- MOA with a PhilHealth Accredited Center with x-ray facility nearest to them, if without x-ray facility
- MOA with an microscopy center, if without laboratory facility

- The NTP Card for each patient will be submitted to PhilHealth at the start and at the end of treatment and a TB registry of the DOTS-Center will also be submitted to PhilHealth for reimbursement purposes.

It is the view of the Consultants that many of these requirements should be reviewed as it is not apparent to the Consultants the goal or decision process being served by the data.

The Department of Health's Information Management Service in cooperation with the Japanese International Cooperation Agency has developed a computer system to gather data output of the forms and reports mentioned above. This is currently being tested at pilot Rural Health Units in Cavite. An early feedback is that there are still errors that need to be addressed and they are confident that they will finish in three to six months.

The Department of Health's Information Management Service is willing to share this computer system with the different TB DOTS centers to achieve better data collection. Data interchange formats do not need to be designed because the system has a built-in protocol that addresses this concern. To be able to use the system, a TB DOTS center is required to have a computer and an Internet connection, the same requirement imposed by PhilHealth for accreditation.

A preview of the system revealed that the system does address all the reporting concerns of the Department of Health National Tuberculosis Control Program. This is a good information collection tool for the Department of Health and the different TB DOTS centers but the system does not address the data requirements of PhilHealth relative to reimbursements. This is due to the fact that when the system was being developed, PhilHealth was not part or privy to this development and their requirements were not part of the project's scope of work.

Based from the above, the following observations can be made:

1. The TB-DOTS center has to reproduce all documents twice, once for the certifying organization and again for PhilHealth since both agencies are looking for the same information. An electronic format of all documentary requirements should be utilized to reduce resources allocated to reproducing such documents and at the same time the certifying organization and PhilHealth should have the capability to share electronic data.

2. During the course of treatment, the Department of Health and PhilHealth are requiring the same documents (NTP Card/Record and TB Registry). If no electronic platform were established between the three agencies (Department of Health, PhilHealth and certifying organization) the TB-DOTS center will have to reproduce several documents during a 6-month course of treatment.

   The central collection and management of data in electronic form should be preferred over the individual organization's collection to facilitate efficient data sharing and exchange between the stakeholders of the enterprise. The cost of collecting and maintaining a paper based information system is so high that this practice should be discouraged. Paper based manual data entry and record keeping is also to be discouraged because of the inherent errors these generate and the tediousness to store and update them. Updates are usually not done in all the different sets of paper based data.

3. There will be three agencies monitoring the performance of a TB-DOTS center. The Department of Health focuses on adherence to national protocols. PhilHealth is concerned with quality assurance activities and cost containment measures such as control of fraud and abuse. The certifying organization, in turn, would monitor how the TB-DOTS center is

adhering to all the requirements of both organizations and the additional standards and criteria of certification. There is significant redundancy of effort.

DATA FOR QUALITY IMPROVEMENT

The self-assessment performed by the applicant center provides 'springboard' information for launching quality improvement activities. Because the clusters of certification standards indicate the general organizational competencies needed to provide quality TB DOTS provision, an applicant center can conveniently locate which competency is most in need of development. This can be validated by the survey report. Actions that are taken in response to any of the identified deficiencies can then be tested for effectiveness and adapted into routine practice if needed.

CORRELATION ANALYSIS BETWEEN DATA SETS

The certification organisation would be interested in data that would determine whether they have fulfilled their mandate or not. This data along with other data collected may hold answers to the success or failure of the DOTS centers to meet standards. It will definitely be simpler to correlate compliance of cure rates to the quality assurance standards surveyed by the certification organisation if it holds all relevant data.

The Department of Health oversight of PhilHealth's requirements may prove advantageous to the private sector. It will not have to share the same infrastructure with the other Department of Health services and clients (particularly disturbing is the 2000 or so Rural Health Units). The private sector may set up a similar system that will support Department of Health, PhilHealth, certification organisation and TB DOTS center information requirements. Double reporting to the National Tuberculosis Control Program will definitely be addressed because the certification organisation should be the body that will do this after collecting all data from the different DOTS centers. Non-compliance to the National Tuberculosis Control Program ruling of an 85% cure rate may mean an automatic cancellation of certification and accreditation. This may be sent via email to all stakeholders. A warning to the TB DOTS center may be sent, still via email, reminding it of its poor performance in cure rates or detection rates long before any of the sanctions are imposed, giving the center enough time to improve. The TB DOTS center's improvement, rather than removal from the system, is more important.

Analytics effectiveness hinges on the data being collected, its completeness and its uniqueness.

It can be observed in the tool used by PhilCAT in the pilots to gather data. It used sufficient lighting as a standard. A quick examination of PhilHealth Circular #17 (Series 2003) states a requirement for adequate lighting in its standards for accreditation under General Infrastructure. However, if one reads on, one will read later that the indicators for such standards are stated as:

> *Indicators: Interiors have lighting adequate for clerical activities and physical examination.*

These details may be lost if the survey sheet is not carefully designed. Furthermore, if one considers the statement, lighting intensity for patient examination is definitely higher than for clerical work. The survey design will depend on the meticulousness of the certification organization and the training of the surveyors.

To be able to utilize analytics accurately, a standard "grading system" or root metrics is assumed. Using the six point Likert scale where one (1) is the lowest and six (6) is the highest possible score, each criterion shall be graded with a score of one to six. The scores can then be tallied and the average per cluster of standard is set as the national average. This may go on to

the regional, provincial and municipal averages. The initial certification survey data compares only to the same set of data. The re-certification data will only be compared with that of the re-certification data. The two sets of data may however be correlated with one another. This is where analytics plays a major role. Human resources cluster in the initial certification survey data may compare well with the human resources cluster of the re-certification set although they second set may have a wider scope than the initial survey.

Reports uncover problems, but they don't have all the data necessary to determine root causes. Multi-dimensional analysis goes beyond measurement and reporting on the certification enterprise activity, allowing the organization to provide in-depth analysis on value indicators such as surveyor performance, the results of marketing, financials, and the market as a whole. A report may find that there were several centers that failed the re-certification. A look at the composition of the certification team may point to a surveyor who is unusually generous with ratings. A host of options may be done including the option to inform all the other centers the surveyor went to and remind them of the areas that need to be complied with.

Surveyor's performance may be gauged by aggregating all the surveys done and find some patterns and trends to the grading style like grading too high or too low. Marketing campaigns may be gauged by the influx of more people to the centers after a major marketing push in a targeted area.

Reporting tools generate static reports. Once the report is generated, it is in jeopardy of becoming out of date if the data behind the report changes. I n addition, the pre-configured nature of static reports built with a tool set hides anything but the most overt trends.

With the setting up of an optimized central data store, data users can count on the same 'truth' in root metrics being available to all data users in the same manner. Analytics allows the organization to uncover:

- where the DOTS center is most effective and where it is not;
- where there is room for improvement compared to the a set national average;
- where a certain center should concentrate to improve; and
- where a certification organization should raise the standards or lighten the burden of a standard set too steep among others.

Reporting tools work by having pre-configured queries to a back-end data source. If a user wants to look deeper and ask a more complex question, a developer will have to completely rebuild the report, including any data queries. If a user wants to ask complex questions with a reporting tool, involved back-end work is necessary.

If a manager wants to further analyze the data contained in the queries and reports, they are forced to use standard office tools. This can tie up the bulk of a certification organization manager's time. Excel and any spreadsheet software for that matter, while a great tool for regular office activities is far from being an optimal tool for generating complex analysis. Microsoft Word and HTML editors, whilst fine for generating Intranets that do not change frequently, are poor at supporting changing requirements.

Most reports are designed to let the reader see the data in 'pre-configured' views that cannot be changed. For a different view, a manager would need a different report. While this is fine for simple data tracking, it is very limiting when trying to uncover hidden trends and relationships amongst data.

Most organisations that rely on reports find that they are constantly cross-checking historical information to make sure they are comparing 'apples to apples'. Survey Team A at one moment in time may not be the same as Survey Team A at another moment in time.
Success is dependent not only on how the certification organization measures, but on how the measurements are analyzed and knowing how to choose the right performance indicators to measure in the first place. While most reports are able to provide efficiency measurements (such as number of centers surveyed, number of centers certified, number of centers per region/province/municipality, *et cetera*), analytics provides the opportunity to truly understand performance by taking efficiency measures and analyzing them against other performance indicators to determine how effective the certification organization really is.

For example, analytics can be used to step up to a higher level conceptually and address more complex issues such as:

- The relationship between performance indicators in the certification organization (e.g., if the organization changes a standard, which among the TB DOTS centers will be adversely affected?)
- Certification organization's performance over time (e.g., how effective is the continual quality improvement effort?)
- Center performance vs. peers and peer groups (e.g., how is one center stacking up against other centers in the province, region, and the nation? Did the center's performance against established national quality standards improve? Where does the TB DOTS center need to concentrate as regards the cluster of standards?)
- Relationship between real performance and organizational objectives (e.g., how has the enterprise performed against ideal standards set? Are the standards set too high? Are the certified organizations able to comply with standards set by the National Tuberculosis Control Program and PhilHealth?)

Several factors play into an optimized certification organization:
- what is happening today (monitoring and addressing key standards and performance issues);
- what happened yesterday (measuring center performance and viewing historical data that might affect future performance); and
- planning for tomorrow (comparing future targeted standards to resources available and creating possible quality oriented outcomes).

Analysis of data allows organizations to address the past, the present and the future and takes a holistic view of the certification organization from the inside out and moving to the highest level of performance. It helps address the questions: "Do these performance indicators really measure the quality standards? Do they make a difference in delivering quality service?"

Analytics provides a better view of monitoring and reporting in the certification organization. Managers and TB DOTS centers alike can constantly know exactly where they stand, and respond quickly to change and trends. Any change in performance can be identified and managed. Trend analysis provides management with the ability to make decisions based on a balanced perspective, rather than individual data points, and can help uncover hidden trends.

IMPLEMENTATION STRATEGY

An extensive range of separate but related activities will need to be undertaken to develop and implement an autonomous TB DOTS center certification program for the Philippines.

CRITICAL SUCCESS FACTORS

Leadership

The singular and most important factor affecting the success of such a major undertaking in the Philippines will be strong medical leadership. The delivery of health services in the Philippines is still very doctor-centric. The health system is still very hierarchical with doctors in the dominant position and all other health professionals taking a subordinate position. Worldwide doctors have been the most difficult group to engage in quality assurance and regulatory activities. There is little evidence of doctors in the Philippines participating in quality assurance activities in a fulsome way. Certification can be an important and effective 'driver' for quality improvement.

A key medical figure or group will be required to commit to the idea and to foster it within the Philippine medical, nursing and allied health community. This person or group must have professional standing that is instantly recognised and whose views will demand respect because of that status.

The standing of PhilCAT with its 52 member organizations representing all the major stakeholders in government, non-government organizations, academe, and private sector groups concerned with the management and control of tuberculosis is significant. Leadership from PhilCAT would be essential for the success of the certification organization regardless of whether PhilCAT itself manages the certification program or it is managed by another organization.

Establishment Team

A strong establishment team will be necessary to give 'life' to the new certification organization. The team will have to be led by someone with excellent project management skills and with access to key decision-makers within the Philippine medical, nursing and allied health communities and within the Department of Health and PhilHealth. The establishment team will have to be provided with adequate resources to undertake the necessary and wide-ranging activities. The establishment team would also need to be provided with access to experts for specific guidance and support (e.g., information technology).

Stakeholder Ownership

Another critical success factor will be principal stakeholder ownership of the purpose and goals of the certification organization. Several principal health-related associations, such as the Department of Health, PhilHealth, specialist societies, and others as appropriate, must come together and agree to support the development and implementation of the certification program in the Philippines. They must agree to some guiding principles and publicly support the certification program. The PhilCAT organization would be perfect for this role.

The stakeholders must establish a project steering committee with appropriate representation from the principal stakeholder group. No one group should be allowed to predominate.

The authority of the certification organization (and status within the Philippine community) will come from the principal stakeholders.

This could be achieved in one of two ways. Firstly, the government instrumentalities (Department of Health and PhilHealth) should identify as principal stakeholders and play a partnership role with the other stakeholders. This model has been successful in a number of international certification bodies (e.g., the Australian Council on Healthcare Standards). The

second means is by establishing the certification organization as an instrument of government - either as a part of government or as a quasi-government body.

The legal framework, within which the certification organization functions, will need to be determined. If it is decided that the certification organization should be an independent body, then it may take the form of an association, a company or an entity with other legal status. In the future, the certification organization will need to enter into contracts as part of its operation and this may have a bearing on the appropriate legal structure. Legal advice will be required.

If setting the new certification organization up as a quasi-government organization, then administrative or political decisions will be needed to create the certification organization as an instrument of government. In either case, an appropriate structure must be implemented to give status and authority to the fledgling certification organization.

A significant number of stakeholders must have ownership. This will require wide-ranging and on-going consultation to develop consensus on a number of important issues. If any one individual or group of individuals is seen to be unduly influencing the direction or outcomes, then either the certification organization will fail to get started or it will be doomed to forever defend its role. Unfortunately the 'down-side' of this approach is the time taken to achieve the consensus position. All of the key stakeholders will require adequate time to consider and discuss with their peers any opinion or advice being sought. If the consensus building process appears rushed, there will be one of two likely outcomes, and both will lead to the same result. One likely outcome will be an ill-considered opinion not representative of the stakeholder group. The alternate outcome will be disengagement from the establishment program without any input from the stakeholder group. In both cases, the result will be a lack of ownership of the certification program and process by the key stakeholder groups.

DEVELOPMENT OF THE CERTIFICATION PROGRAM

The broad categories of activities required to develop and implement a certification program are outlined:

Outlined below are the key tasks required to establish the certification organization and program:

1. Development of work plan
   The scope of activities and work plan must be developed in consultation with a Project Steering Committee. The aim of this process is to ensure that the goals are attainable within the time and resources available and that activities are consistent with the guiding principles agreed to by the principal stakeholders. The final work plan should be a comprehensive document that will be the basis for all activities within the first year of operation (the establishment and consolidation phase).
   Time to complete: ~1 month

2. Review and revision of the standards and criteria
   The establishment team will need to quickly review the standards and criteria in light of the recent pilot process. Some modifications will be required.
   Time to complete: <1 month

3. Certification process development
   The establishment team must design the certification processes. A feature of this work will be to develop a range of tools for TB DOTS centers to use to demonstrate their achievement of the standards and to enables surveyors to assess the achievement of standards. This work can be based upon the work already undertaken in the pilot process but should be reviewed

against the recommendations in this report and the work of other international certification bodies. The establishment team will also have to develop a rating system for self-assessment and for the surveyors to assess the level of achievement of the standards. The rating system used in the piloting process needs to be modified in line with recommendations in this report.
Time to complete: 1-2 months

4. Formal endorsement of the standards and program
   The certification organization must formally endorse the standards and certification process. This process gives status to the standards and authority to the certification process.
   Time to complete: <1 month

5. Policy and procedure development
   The policies and procedures for the new certification organization are required to support the implementation of the new standards and certification process. An operational handbook for the secretariat of the certification organization will need to be developed. The operations manual guideline will give guidance for this work (see Appendix G). Forms and documents for the new certification organization will need to be developed, though noting most should be created in the electronic medium.
   Time to complete: 1-2 months

6. Develop training packages, select and train surveyors
   The new certification organization will need to develop training packages for surveyors and then determine surveyor numbers, professional background, cultural appropriateness and skill mix for the inaugural period of program implementation. It will then need to determine selection criteria based on identified competencies and then recruit and train the new surveyors. Recommendations in this report can guide this process.

   For the greatest majority of TB DOTS centers using the certification program, the surveyors will be the 'face' of the certification program. Their competency and professionalism is critical to the reputation, and eventual success, of the new certification program. The importance of careful selection and thorough training of surveyors cannot be underestimated. Surveyor selection and development should be guided by the recommendations in this report.
   Time to complete: 1 month

7. Develop and deliver promotional and training packages
   The initial acceptance of the certification program by TB DOTS centers will, in part, depend on the ability of the new certification organization to promote itself and the certification program to a wide audience of potential TB DOTS providers, the community and to key stakeholder groups. The stakeholder organizations are important in this phase so the new certification organization should be prepared to make formal and informal presentations to a range of stakeholders.

   However, the ultimate acceptance of the certification program will largely depend on the development and delivery of information and training packages to Rural Health Units, Local Health Centers and potential private sector providers. A range of written materials will need to be developed focussing on the different end-users. The training packages should only be delivered by personnel with expertise in the subject area to ensure program credibility.
   Time to complete: 2 months and then ongoing

The times indicated for completion of the major steps in the implementation plan are estimates only and are based on the consultant's limited knowledge of the heath care community in the Philippines and experience of developing similar programs in Australia, Bulgaria and New Zealand. However, it should be noted that some of these activities could be undertaken in parallel with other activities so that the total completion time is not necessarily the sum of the times indicated (10 months). It is unrealistic though to expect to develop, and operationalize, a local autonomous certification organization in less than 6 months.

PILOT TESTING AND REVISION

One of the most important steps in any major project must be testing of the validity, reliability and integrity of newly designed systems. In the case of a certification program, there must be adequate pilot testing of the standards and survey process.

The TB DOTS centers and the pilot surveyors will need to be chosen carefully. They need adequate training and support. Their experience of the piloting process and their ability to constructively advise on improvements is a critical success factor for this project. The pilot TB DOTS centers and surveyors need to be fully and continuously appraised of developments consequent to their input into the piloting process to keep them engaged.

With their ultimate acceptance of the new standards and certification process will come the new certification organization's strongest support for the new standards and certification process. This process of pilot testing and revision may have to pass through more than one cycle.

Please note the initial pilot testing of the standards and the survey process was completed before the completion of this consultancy so accordingly, the Consultants must strongly recommend an analysis of the pilot process. That analysis must then be considered in light of the recommendations in this report.

DEVELOPMENT OF APPROPRIATE PERFORMANCE MEASURES

The use of performance indicators needs to be encouraged by and built into the TB DOTS center certification program. These performance indicators should be based on the following principles:

- the performance indicators should be transparent;
- information should be made available to those to whom it relates and those who want it;
- performance indicators should have intrinsic value to the collectors to ensure accurate collection and subsequent use for quality improvement;
- performance indicators should require minimal additional effort for TB DOTS center staff in collection;
- performance indicator data should first be reviewed by the collectors to ensure accuracy and to minimise misinterpretation; and
- performance indicators should be regularly reviewed.[41]

Clinical indicators are defined as measures of the clinical management and outcome of patient care.[42] They are not exact standards against which providers must measure their clinical performance, but rather are designed as 'flags' that can alert to possible problems or

[41] Measuring Performance in the Australian Health System - Towards a National Performance Assessment Framework. National Health Performance Committee, Commonwealth Department of Health Canberra, ACT, Australia, June 2000.
[42] The EQuIP Guide. The Australian Council on Healthcare Standards, July 1999.

opportunities to improve patient care. They are a measurement tool to assist in assessing whether or not a standard in patient care is being met.

Indicator monitoring is an important component in the evaluation of a health care organization's performance. They are one means by which patient care can be measured, assessed and demonstrated by health care organizations. Most importantly they lend objectivity and interest to quality activities by allowing comparison of performance. Their use may also identify areas for further quality activities, generate ideas for new studies and lead to the development of TB DOTS center-specific indicators. Their clinical focus is important in engaging doctors in quality activities.

The Australian Council on Healthcare Standards (ACHS) was the first certification organization worldwide to introduce clinical indicators into an accreditation program. As a consequence, the ACHS now regularly provides health care organizations with data that compares the clinical indicator results of their organization with the results of similar organizations.

All of the ACHS clinical indicators have been developed in collaboration with medical specialist societies and associations to ensure that relevant clinical issues are addressed. It is highly recommended that any clinical indicator development in the Philippines involve PhilCAT and the specialist societies.

The development of clinical indicators and the provision of an indicator comparative report service are expensive undertakings and mirror the cost of establishing the certification program itself.

When developing performance indicators there are a number of important considerations to be made:

1. Performance indicators should focus on the dimensions of quality (access, appropriateness, safety, consumer involvement, effectiveness and efficiency) and be useful to clinicians, managers and the community at large.
2. Indicators need to be rigorous to be useful. They need to be subjected to bio-statistical / epidemiological scrutiny in their development and when provided in aggregated form to clinicians, managers and the community. Performance indicators should be of a comparative nature. They should compare a health care organization over time (longitudinal analysis) or compare similar organizations (cross-sectional comparisons).
3. The collection methodology has to be considered in the design of a performance indicator. Historically, information technology has been developed to meet the needs of financial and management requirements of health care organizations, and not for collection of clinical performance measures. This becomes a major issue confronting any organization wishing to collect performance measurements. Data should be easy to obtain.
4. Key stakeholders (particularly doctors) need to be involved in indicator design. This is an effective means of increasing the involvement of doctors in quality improvement activities and, of course, in the certification process. Though with nurses and other health workers playing such an important role in TB DOTS, the development of performance indicators will need to involve a multidisciplinary approach with broader stakeholder involvement.

Performance indicators are intended to complement the certification process and provide a focus for quality improvement. They allow for the objective measurement of the management and outcome of patient care. They are an effective means by which TB DOTS centers can demonstrate how they are monitoring and improving performance.

One of the aims of the TB DOTS center certification program should be to ensure that the use of performance and outcome measurement is seen as part of the full cycle of quality improvement and that TB DOTS centers can appreciate the power of using data to their advantage.

Below is a simple outline of the key activities associated with the development of performance indicators:

- Review the diversity and uptake of performance indicators world-wide
- Review the efficacy of existing performance indicators in the Philippines, such as those used in the National Tuberculosis Control Program
- Develop performance indicators through an iterative process with appropriate stakeholders including a bio-statistician
- Field test the performance indicators
- Formally endorse the performance indicator and introduce into the certification program

It could be anticipated that a performance indicator project to develop a few key performance indicators would take between one and two years to complete from time of commencement.

Having introduced the indicator into the certification program, ongoing data collection and analysis would be required. This process is expensive to maintain if it is a 'stand alone' system. The ACHS Performance and Outcomes Service provides a comparative report service for approximately 400 health care organizations twice yearly and regularly reviews and updates the ACHS performance indicators. There are more than 30 clinical indicators though not all organizations report all 30 clinical indicators. This service costs approximately P13,000,000 per year to maintain.

The ACHS is strategically placed to assist the Philippine certification organization develop clinical and performance indicators. Alternatively, the ACHS can provide the service to certification program utilizing modifications of the Australian indicators. Currently the ACHS provides this service to New Zealand hospitals via Quality Health New Zealand.

THE COST OF CERTIFICATION

There are two distinct elements of cost associated with participation in a certification program.

The first is the cost internal to the TB DOTS center in preparing for the certification process. TB DOTS centers with well-developed structures and processes for quality patient care will not find the cost of preparation great. Of course, there is the need to prepare documentation for the certification process but this should not be onerous as the certification program will be designed to assess the TB DOTS center's structures, processes and outcomes and not compliance with certification protocols.

Unfortunately, many TB DOTS centers do not have the appropriate structures or processes for quality TB care and must use the process of preparing for the certification survey visit to help them establish those structures and processes. All too often they then will confuse the cost of establishing those structures and processes (a part of good practice and management) with the cost of preparing for certification.[43]

[43] Smith D, Deane P. EQuIP certification: Feedback from a Sydney teaching hospital. *Aust Health Rev* 2000; 23(2): 200-203.

Care will be needed to ensure that the marketing strategy addresses the potential criticism that certification is costly because of the need to establish appropriate structures and processes for quality TB care. It must be clearly and logically argued that this is not a cost of certification.

The second cost element is the fee for participation in the certification program. There are four key factors that impact upon the fee structure:

SUBSIDIZATION

The certification program may be wholly, or partly, subsidized by government (or another source) or the program may be totally independent and self-funding. Obviously, the cost of participation will be dependent on whether-or-not subsidies apply and the amount of subsidization. If the certification program is totally independent and self-funding, then the scale of the certification program will have an impact on the fees levied because of the fixed overheads. These fixed overheads will need to be distributed to the participants in the program. Small certification organizations will need to pass on to each participant a larger portion of the fixed overhead.

For the purpose of this consultancy, it has been assumed that the certification organization will be self-funding in the long term. The Consultants have made no allowance for subsidization of participation, though in fact this may occur by other means. In many parts of the world governments or funding authorities provide subsidies directly to the participating health service as a means of fostering participation.

ESTABLISHMENT COSTS

As stated above, the certification program should be designed to become self-funding over a number of years. However, there will be establishment costs and little, if any, cash flow generated in the early months. A form of subsidization will be required until the program expands to generate sufficient cash flow. As an example, the New Zealand accreditation program took approximately 18 months to become fully operational (this included standards development) and it required supplementary funding for a further 3½ years.

This start-up funding may be provided by way of a non-repayable grant, a commercial loan or an interest-free loan. A number of examples of each variation exist around the world. When the certification program commences, the organization will need to cover the borrowed establishment funds early in the start-up phase (unless given as a non-repayable grant). This will have a direct impact on the fees charged for participation.

For the purpose of this consultancy, the Consultants have assumed the program will receive start-up funding to off set the cost of establishment and that this will be in the form of an interest-free loan.

INFRASTRUCTURE AND OVERHEADS

Staff

Most certification organizations require a paid core of professional and non-professional staff to manage the certification program. Some do exist wholly as voluntary organisations (associations).

A key element in determining the number of staff is the number of TB DOTS centers participating. There is a minimum number of staff required to effectively run a TB DOTS certification program. That number can manage increasing numbers of participating TB DOTS centers to a point where additional staff is required. Therefore there is a minimum fixed cost

for staff and the contribution by participating TB DOTS centers to that fixed cost varies somewhat according to the numbers participating.

Similarly, the complexity of the certification process directly impacts the number of staff required. The TB DOTS center certification process is relatively simple compared to many other programs of certification and accreditation. The frequency of certification survey visits also has a direct impact on the management of the process, and hence the number of staff required.

The range of skills required also has an impact on the number of staff required. It is rare to find individuals with the complete set of competencies required for the many discrete activities of managing a certification program. Some of the specialist skills may best be purchased in on a 'needs' basis. This is particularly so in the early stages of organizational development and when the organisation is small.

In the early development of the certification organization, staff will need to be multi-skilled. Responsibilities will need to overlap to ensure continuity of service provision in times of staff absence or attention to other specific tasks (e.g., training). Effective communication between staff will be a critical success factor for the fledgling certification organization.

International experience suggests that a health background is essential to provide the right focus for the multiple competencies required for the certification organization. Nurses are the most likely professional group that will have the background and skills necessary to manage the certification program.

Based on the Consultants' experience with similar programs and an understanding of the tasks to be managed, it is estimated that one multi-skilled professional can manage approximately 180 survey visits per year (see Appendix XX for assumptions).

This person would need the support of an administrative assistant. As the number of surveys grow, additional professional staff would be required, although the administrative support staff would not need to expand at the same rate. Information technology and communication expertise should be provided on a contractual basis in the early phases of organizational development. There will come a point, however, when it will become more economic to employ staff with these skills. This will need to be monitored within the annual operational review by the management and board.

Specialized financial management and accounting skills should also be provided on a contractual basis in the early phases of organizational development. However, with the potential of significant cash flows and the need to carefully plan program expansion to avoid waste and duplication, financial management and accounting skills may need to become an integral function for the certification organization.

A staff of two professionals and an administrative assistant would be required to manage the certification program in its initial start-up phase. This arrangement would provide some initial redundancy. However, the benefit of two professionals working as a team would far outweigh the disadvantages of this arrangement. Ideas for operational processes can be internally tested and challenged within the team ensuring a better outcome. Professional isolation is also a risk avoided by starting with two professional staff.

SURVEYORS

Category

As discussed above, surveyors fall into three main categories and each has different implications for the cost of the certification program.

1. Employees
   The certification organisation may employ full-time or part-time surveyors. The fees charged for participation in the certification program are a direct function of the amounts paid to the surveyors, inclusive of the 'on costs' of employment.

   The professional background of the surveyor may determine the pay rate (e.g., doctors would normally expect to be paid more than a nurse is) or all surveyors could receive the same pay rate because the work being done and the contribution to the process is the same. The major accreditation program in the USA uses, almost exclusively, employed surveyors with different rates being paid according to professional background.

2. Contractors
   The second category of surveyor is the independent contractor who devotes part of their time to certification. The fees charged for participation in the certification program again reflect the fees paid to the surveyors but there are additional training and management costs for the certification organization associated with this category surveyor. Again, the professional background of the surveyor may determine the pay rate or all surveyors, regardless of professional background, could be paid the same rate.

   Another approach is to pay an honorarium. An honorarium is not a 'commercial' rate for the services rendered. It is a rate that provides recognition for the commitment to the certification program. This is the approach used in the major accreditation programs of Australia, Canada and New Zealand and in some programs in the USA. The honorarium rate ranges from 1/5 to 2/3 of a 'commercial' rate depending on the professional background and the program. An alternate approach is to pay a differential honorarium based on the professional background of the surveyor.

3. Volunteers
   The last category of surveyor s is volunteers. These surveyors are professionals employed in the health system and the employer allows them to absent themselves from their usual employment to participate in a certification survey. No fees are paid to the surveyors so the cost to a participating TB DOTS center is less. However, as with contractors, there are usually additional training and management costs for the certification organization associated with volunteer surveyors because employers normally restrict the number of absences per year.

A critical decision to be made is whether-or-not to pay the surveyors for participation in surveys. Most programs around the world use volunteer surveyors or they pay a modest honorarium. There are limited examples of professionals within the Philippine medical community giving freely of their time and expertise, especially when the commitment would be significant and ongoing. Based on interviews with a number of stakeholders, it is the Consultants' opinion that a program based on contracted surveyors being paid a differentiated honorarium would be very successful in the Philippines.

Further, it is recommended that the rate for doctors be linked to the Department of Health honorarium rate, which is currently P500 per half day. Similar published rates should be used to 'peg' the honorarium rate for other professionals working as certification surveyors.

Recommendation 35. The certification surveyors be contractors paid an honorarium initially 'pegged' to the Department of Health honorarium rate approved by the Department of Budget and Management for doctors and to the Civil Service Commission honorarium rate for other professionals.

Paying the honorarium to surveyors is one of the greatest costs of running the certification organisation.

Numbers

Survey Team

The size of the survey team will have a direct influence on the cost of the certification program. For the initial pilot process a team of three persons was recommended. The Consultants have recommended a team of two surveyors chosen for their expertise as TB DOTS center surveyors and not as representatives of a stakeholder organization.

Total Workforce

There is an obvious correlation between the number of TB DOTS centers to be surveyed and the total number of surveyors required.

Full-time employed surveyors would be able to do more surveys per individual surveyor. As implied above, if volunteer surveyors are used, then many may not be available to do surveys due to other work commitments thus requiring a larger surveyor workforce to cover the number of TB DOTS center surveys. The same will be true for contractors, especially if being paid a non-commercial honorarium rate.

The benefit, however, of not using full-time surveyors is that part-time contractors and volunteers remain very much a part of the broader workforce and thus maintain their broad knowledge and skills. When they visit a TB DOTS center, those being surveyed perceive the surveyors as professional peers and not as bureaucratic inspectors with little knowledge of their work and experience.

Experience from around the world varies. Those countries and programs using a mix of contractors and volunteers generally find surveyors are limited in the number of days they can commit to surveying per year. Specific experience in Australia, Bulgaria, Canada, New Zealand and South Africa suggests that most surveyors can only commit to an average of seven to eighteen days per year.[44] Most prefer to do their survey work in blocks of multiple days rather than a day here and a day there. For the purposes of this consultancy it is assumed that each surveyor will be able to commit ten days per year to surveying and an additional two days per year for training and continuing education.

As a consequence of independent contractors and volunteers doing fewer surveys, there are additional management, recruitment, preparation and training costs for the certification organisation. However, a large and physically dispersed surveyor workforce can reduce travel and associated costs.

Time to complete the certification survey

As discussed above, the Consultants believe the survey can be completed within several hours.

[44] Smith, D. Personal correspondence with the Australian Council on Healthcare Standards, the Bulgarian Accreditation Council, the Canadian Council on Health Services Accreditation, Quality Health New Zealand and the Council for Health Service Accreditation of Southern Africa.

Most survey teams would then be able to complete two certification surveys in a day inclusive of travel if surveyors are strategically located throughout the country (see also below Travel and Accommodation). An allowance must be made however for a percentage of days that, due to travel arrangements, only one survey will be completed. For the purposes of this consultancy, it has been assumed that the average number of surveys completed per surveyor day is 1.5.

Surveys Completed

For the purposes of estimating the costs, a timeline for certification will assume a fixed percentage of potential TB DOTS centers will be certified within one complete certification cycle. In all of the modelling, increasing numbers of TB DOTS centers will be certified in the subsequent year.

TRAINING

Induction Training for the Surveyor Workforce

As stated above, induction training is critical for the successful introduction of new surveyors into the certification program.

The induction-training program will take between one and two days depending on the experience of the trainee surveyors and they will need to be provided with teaching aids and material, including a surveyor's guidebook.

A number of issues need to be considered when estimating the cost of induction training. A critical mass of surveyors will need to be trained in the first months of the new certification organization. Training cannot be effective if the group is too large. An optimal group size is between 20 and 30 persons. If the group is larger, there is always the risk of 'disengagement' by a few, minimizing the learning opportunity. If the group is too small, it is not cost effective to run. Given the size of the country and the projected growth of the certification program there should be at least two induction-training programs conducted within the first months of the new organization. The management team will need to constantly appraise itself of surveyor demand and plan induction training accordingly.

Other issues to consider in the cost of induction training program include the honorarium to be paid, venue hire and meals to be provided. There will also be the usual transportation, accommodation and 'out-of-pocket' expenses for both the trainee surveyors and the certification organization trainers.

On-Going Training and Education

The certification organization will need to establish a system for subsequent training for the surveyors. To maintain currency of knowledge and skills, surveyors should be expected to attend a 'refresher' one-day training program every two years.

TRAVEL AND ACCOMMODATION

The Philippines is a geographically large country spread across more than 7000 islands. Many areas are not serviced by regular and reliable transportation services.

Moving surveyors around the country and accommodating them whenever travels cannot be completed within one day is costly. Having a workforce of surveyors strategically located throughout the Philippines can minimise the cost associated with TB DOTS center surveys.

However, this has to be carefully balanced with the need to avoid conflicts of interest and bias if surveyors are only drawn from areas proximal to the TB DOTS center being surveyed. Sometimes it will be necessary to 'import' surveyors from other regions to remove conflicts of interest and bias.

There will always be a need to move surveyors around the country and to accommodate them. Standards for the mode of transport and the level of accommodation and associated 'living away from home' expenses must be set to avoid unnecessary expenses.

Every effort must be made to maximize the efficiency of travel by scheduling surveys by geographic proximity. The aim must be to have two surveys completed in each survey day by a pair of surveyors. Ideally, scheduling of surveys should achieve minimal travel distances between TB DOTS centers. Of, course this will not always be possible and an allowance must be made for some inefficiency and additional cost.

For the purposes of the estimations, the Consultants have assumed that a pair of surveyors can survey 15 TB DOTS centers in 10 days of surveying due to unavoidable scheduling inefficiencies. It has also been assumed that some overnight accommodation will be required. The Consultants have assumed that 10% of survey days will require overnight accommodation and associated allowances for meals.

PRINTING

An allowance has to be made for the printing of the final production copies of the standards and the accreditation program document. These may be sold or provided as part of the package provided to applicant TB DOTS centers (so the cost of printing could be recovered). This must be considered as part of the marketing strategy. It may be better to provide the standards free of charge to any interested TB DOTS center as a means of marketing the certification program. Promotional material will also need to be produced and distributed to all prospective clients of the certification program. This promotional material may include the standards.

Additionally, many copies of the standards and the certification program will need to be provided 'gratis' to stakeholder organisations.

The economics of printing may mandate a large print run resulting in stock being held.

PROMOTIONAL WORKSHOPS

Education (promotion) about the new certification program will be critical. Much will have to be provided 'gratis' to engender interest. Seminars are an appropriate means of communicating to a large and specific audience (e.g., seminars for doctors, nurses, private clinics, *et cetera*). Specific training programs should be developed and delivered on a fee-for-service basis (not included in the program costings).

EXPENSES AND REVENUES

All of the calculations for the expenses and revenues of the certification program can be found in the appendices. The assumptions are based on the issues identified in the foregoing body of this report.

Appendix H provides an analysis of the expenses and revenues required for a break-even situation if certifying 1350 mixed public and private TB DOTS centers over 5 years. Appendix I provides an analysis of the expenses and revenues (based on the same survey fee as the previous example) if certifying 150 private TB DOTS centers over 5 years. Appendix J

provides an analysis of the expenses and revenues required for a break-even situation if certifying 150 private TB DOTS centers over 5 years.

OPTIONS FOR THE CERTIFICATION OF TB DOTS CENTERS

The Consultants have been requested to develop a plan that would facilitate the establishment of a TB DOTS certifying organization. Implicit in that request is the need to ensure the organization provides an effective and operationally efficient model of certification.

The Consultants needed to make a number of assumptions in undertaking this work. Many of these were identified in the Inception Report and others are identified in the body of this report. Throughout the Inception Report and this report the Consultants have attempted to explain clearly why the assumptions were necessary and the rationale for selecting the various positions taken in this report.

The contents of this report and its appendices can give considerable guidance to any group wishing to establish an autonomous certification program for TB DOTS centers. However, the Consultants cannot recommend the establishment of an autonomous certification organization for TB DOTS centers. The reasons for this position are many.

THE MARKET FOR CERTIFICATION

Tuberculosis is a major health problem in the Philippines and, although private health services constitute the dominant service provider network in the Philippines, the private sector provides limited formal care for TB (9.6% overall).[45] The majority of TB DOTS is provided by the public sector through the more than 2400 Rural Health Units and Local Health Centers spread throughout the Philippines.

At present, there are only five recognized private TB DOTS centers and there is a goal to expand this to 150 sites spread throughout the country over the next five years. The number of private TB DOTS centers may be greater, but that number cannot be estimated at this time.

Consequently, the potential market for TB DOTS center certification is either the total number of TB DOTS centers in the country (2400 plus 150) or it may just be the private sector providers (150). The Consultants believe the potential market is only the projected 150 private sector TB DOTS centers. The reason for this position is explained below.

DUPLICATION OF EXISTING DEPARTMENT OF HEALTH PROGRAMS

In each region of the Philippines, the Department of Health implements its programs and policies through the Center for Health and Development. The Director of these Centers, and the staff designated to provide technical assistance to communicable disease programs, are responsible for ensuring that local health professionals working in both the public and private sectors are aware of the proper management of all communicable diseases, especially tuberculosis. These Centers are providing guidance and assistance to local health professionals to ensure proper implementation of the DOTS method. Specifically, they are visiting the Rural Health Units and Local Health Centers to ensure proper delivery of TB DOTS. In addition, the regional Department of Health, and local government health staff, have begun to actively advocate for the adoption of TB DOTS by private physicians, recognizing that much of the noncompliance to DOTS occurs in the private sector.

[45] 1997 National Tuberculosis Prevalence Survey

PhilCAT has identified local experts in various aspects of TB management for each region. These people provide a resource to local TB DOTS providers. PhilCAT advocacy has been successful in promoting the standards for TB DOTS centers. All of the Department of Health Regional Directors interviewed as part of this consultancy are familiar with the standards and many are using them within their region when assessing TB DOTS provision by the Rural Health Units and Local Health Centers.

The inspection visits of the Rural Health Units and Local Health Centers by regional Department of Health staff address many of the standards and criteria proposed for TB DOTS center certification. A certification survey would duplicate much of the evaluation work done by the Department of Health. Given the limited health resources in the Philippines this cannot be justified.

The Department of Health has an obligation to ensure the quality of health care provision throughout the country. It has resources throughout the regions and its staff regularly visits and inspects Rural Health Units and Local Health Centers. The Consultants strongly believe the Department of Health should assume responsibility for certifying the Rural Health Units and Local Health Centers as TB DOTS centers (if they center is providing TB DOTS). Certification, as it has been recommended for TB DOTS centers, is a regulatory function. The Department of Health has a regulatory role.

The certification should be based on the recently developed standards and criteria for TB DOTS centers. Many regions are aware of the standards and criteria and fully support their implementation in the Rural Health Units and Local Health Centers providing TB DOTS.

Additionally, the Department of Health is 'rolling out' the *Sentrong Sigla* program. One of the specific goals of *Sentrong Sigla* is to ensure that participating health facilities have the appropriate structures and processes to ensure quality care. The standards that form the basis of the *Sentrong Sigla* program incorporate all of the core TB DOTS center certification standards and criteria, including those that are unique to tuberculosis management (e.g., the need for skilled microscopists and course-long supplies of medicines). The *Sentrong Sigla* program is currently training people to provide technical assistance to Rural Health Units and Local Health Centers. The aim of the technical assistance is to assists these facilities understand and implement the standards. According to current planning, 60% of health facilities will have complied with *Sentrong Sigla* standards for quality services by the end of 2004.[46]

The *Sentrong Sigla* audit has a broader focus than the TB DOTS center certification. The Consultants were advised that the standards could be easily adapted to incorporate the specific and unique requirements for TB DOTS centers.[47] Although it is unlikely that many Rural Health Units or Local Health Centers will be audited in the next year or two, in the not distant future it is expected that the majority of Rural Health Units and Local Health Centers will be audited. Certification surveys would duplicate the work of the *Sentrong Sigla* audit, especially if the *Sentrong Sigla* audit standards were modified to meet the specific requirements of best-practice TB DOTS.

[46] Sentrong Sigla Strategic Framework and Plan Year 2000-2004. Department of Health, Manila, 2nd printing, July 2000.
[47] Acuin, JM. Personal communication with Cabotaje M. Director, Communicable and Non-Communicable Disease Control Division, Department of Health.

PHILHEALTH AND THE DEPARTMENT OF HEALTH WORKING IN PARTNERSHIP

The aim of the proposed certification program is to provide an assurance to PhilHealth that the services it purchases on behalf of its contributors are of a high standard and quality. Certification should lead to accreditation by PhilHealth.

The minimization of duplication can only be achieved if there is trust between the parties and there is efficient sharing of information. At the moment PhilHealth has limited confidence in the capacity of the Department of Health to carry out the survey activities to the standard required for the certification process. As PhilHealth ultimately accredits TB DOTS centers based on the certification result, it is imperative that PhilHealth can rely on the Department of Health process.

It is recommended that PhilHealth and the Department of Health have high level discussions on the needs and capacities of both. The Philippine health system cannot afford the two principal stakeholders to be forcing duplication of effort because they cannot agree on ways to work together.

PhilHealth has already started accepting the Department of Health *Sentrong Sigla* certification of Rural Health Units and Local Health Centers for purposes of accreditation and payment of benefits. The *Sentrong Sigla* standards development group adopted many of the quality elements contained in the PhilHealth Bench Book, including the standards and the principles for conducting self-assessment and surveys. In the future, *Sentrong Sigla* citation of private clinics could also lead to PhilHealth accreditation.

In the meantime, the Consultants believe PhilHealth and the Department of Health can work in partnership to ensure the current Department of Health inspections could meet the requirements for PhilHealth accreditation. It is accepted that some modifications of the inspections would be required to address the specific needs of TB DOTS.

At the very least, regional PhilHealth staff could participate in the inspections with the regional Department of Health staff. The marginal cost to PhilHealth for this approach would be negligible and could be phased out once the *Sentrong Sigla* audit program has gathered pace.

THE COST

The cost of setting up and running an autonomous, self-funding certification program for TB DOTS centers is not insignificant. The Consultants have estimated that the start-up cost to establish a certification program that would certify 75% of all public TB DOTS centers and 100% of all private TB DOTS centers over a five-year period would be in excess of P4,500,000. To cover the cost of the program, TB DOTS centers would need to pay in the order of P20,000 for the initial certification survey and P30,000 for subsequent surveys.

This amount would equate P50,000 for a certification period of 4 years or P12,500 per certified year. The Consultants were unable to fully test price sensitivity however a number of senior Department of Health personnel and local government representatives were requested to give their opinion on price sensitivity. There was uniform consensus that P10,000 per survey would be an acceptable price. Unfortunately, the Consultants were unable to clearly distinguish if this amount would be acceptable if spread over an extended certification period (as implied above). When asked if they thought P20,000 was a reasonable price to pay they were unanimous in saying it was too high.

However, all wondered why the Rural Health Units and Local Health Centers would need to go through the process once the *Sentrong Sigla* audit program was operation. The Consultants

agree. There can be no real justification for a separate certification program once the *Sentrong Sigla* audit program is operational in the Rural Health Units and Local Health Centers. Accordingly, it is difficult to justify the expense of setting up a program that will become redundant in the public sector over a period of a few years.

Setting up a program just for the private sector cannot be justified. The overhead costs associated with establishment and maintenance would make the cost of certification for the small number of private TB DOTS centers prohibitive. The Consultants have estimated that the start-up cost to establish a certification program just for the limited private sector would be in excess of P3,000,000. To cover the cost of the program, the private TB DOTS centers would need to pay in the order of P50,000 for the initial certification survey and P80,000 for subsequent surveys.

Furthermore, anecdotal evidence provided to the Consultants from potential and existing private TB DOTS centers suggests the P4,000 benefit from PhilHealth is barely adequate in financial terms to make setting up a private TB DOTS center attractive. If there were a significant financial impost for certification, the balance would be tipped against setting up new private TB DOTS centers. Although not tested in any meaningful way, the Consultants are confident that P32,500 per certified year would not be acceptable to private providers.

FINAL RECOMMENDATIONS FOR THE CERTIFICATION OF TB DOTS CENTERS

The Consultants cannot recommend the establishment of an autonomous certification organization to certify all TB DOTS centers. The Department of Health already has a process for encouraging best practice in TB DOTS and has a process to review the activities of the Rural Health Units and Local Health Centers. This process will be supplemented in time by the *Sentrong Sigla* program.

PhilCAT and other significant stakeholders must promote improvements in the current Department of Health processes and facilitate acceptance of those processes by PhilHealth for the purpose of accreditation and benefits payment.

The establishment of a certification organization just for the private sector TB DOTS centers cannot be justified on economic grounds. It is just too expensive for the small numbers involved.

The Consultants recommend a two-stage approach to certification for the private sector. PhilCAT should continue to manage the certification program using the same methods and approaches adopted for the pilots. Certification for the pilots was completed by teams of volunteers and from within existing resources of the organization. The organizational aspects were managed from a range of project funds. In the short term this process will be adequate, albeit the Consultants have made a number of recommendations for improvements to the certification process. These should be actively considered and implemented as appropriate.

Based on experience of the Team Leader, PhilCAT should be able to manage the certification process for up to 35 to 50 TB DOTS centers. Beyond that, the internal resources of PhilCAT will be 'stretched' and begin to detract from core PhilCAT activities.

Once the number of private TB DOTS centers reaches this critical number or in approximately one year's time, PhilCAT should look to out-source the certification program to another organization with the skills and ability to manage the certification program for private TB DOTS centers.

Two distinct organizations already exist in the Philippines that could manage the certification program for private TB DOTS centers.

The first is the Philippine Council for Accreditation of HealthCare Organizations (PCAHO). This organization has been surveying and reviewing the performance of health care facilities for nearly five years. It has well established processes for training surveyors, reviewing performance against standards and making accreditation decisions. As it already has the infra structure, it would be able to provide certification at a fee level more likely to be acceptable to the private sector. Their fee for surveying a polyclinic is approximately P20,000 plus costs for travel and associated expenses. PCAHO charges P10,000 for annual audits. Given the recommendation for the duration of certification, this would equate to P15,000 per certified year.

The alternate is to offer the certification program to a commercial certification organization. A number of these exist in the Philippines. A few have experience in the health sector certifying quality systems to ISO9000. The Consultants were advised that fees were based on cost per auditor day. Using the existing rate, a commercial certification organization would charge approximately P30,000 plus costs for travel and associated expenses for a certification survey.

The above rates are indicative only. However, given the size of the market and the cost of establishing and maintaining a certification organization, it appears sensible to out-source the certification of private TB DOTS centers after a period of time. The Consultants do not believe an independent private certification organization is not feasible.

Recommendation 36. An independent certification organization should not be established.

Recommendation 37. A two-stage approach for the certification of private TB DOTS Centers should be considered. PhilCAT should continue to survey the first small group of TB DOTS centers using the key recommendations in this report to strengthen the process.

Recommendation 38. An independent private certification group should be contracted to survey the rest of the targeted total number of private TB DOTS Centers.

Recommendation 39. PhilCAT should continue to focus on its six core goals.

Recommendation 40. PhilCAT should remain accountable for the certification program and continue to own the certification standards. This would require PhilCAT to regularly review and update of the standards.

APPENDIX A - DOCUMENTS REVIEWED

To assist the Consultants' work, copies of, or access to, the following documents have been provided:

1. Certification of TB DOTS Centers and Providers Systems Design [JM Acuin]
2. Diagnosis, Treatment & Control of Tuberculosis, Clinical Practice Guideline No.3 [Philippine Society for Microbiology and Infectious Diseases and the Philippine College of Chest Physicians]
3. International Standards for Health Care Accreditation Bodies May 2000 [International Society for Quality in Health Care]
4. Manual of Procedures for the National Tuberculosis Control Program, 2001 [Department of Health]
5. Miscellaneous Inspection Reports from the pilot certification reviews [PhilCAT]
6. National Health Insurance Act 0f 1995 (RA 7875) Pasig City: Philippine Health Insurance Corporation, 2000.
7. PHIC TB Outpatient Benefit Package [PhilHealth]
8. Profile: Philippine Coalition Against Tuberculosis (PhilCAT) 19 June 2003 [PhilCAT]
9. Quality Assurance System for PhilCAT, the TB DOTS Centers and Providers [JM Acuin]
10. Quality Standards List for Health Facilities, *Sentrong Sigla* June 2003 [Department of Health]
11. RHU/HC Supervisory Package, *Sentrong Sigla* May 2003 [Department of Health]
12. *Sentrong Sigla* Movement Strategy and Framework 1999-2004. Manila: Department of Health, 1999.
13. Technical Assistance Package, *Sentrong Sigla* May 2003 [Department of Health]
14. The TB DOTS Situation Analysis Instruments [SP Masulit]
15. Training Plan for Certification / Quality Assurance Group [JM Acuin]
16. Updated Work Plan of the Philippine Tuberculosis Initiatives for the Private Sector (TIPS) Project [Chemonics International]
17. What is DOTS? A Guide to Understanding the WHO-recommended TB Control Strategy Known as DOTS [World Health Organization]

APPENDIX B - CONSULTATIONS

Mr Jose	Angeles	Communications Advisor		PhilTIPS
Dr Charito F	Awiten	Regional Director	Center for Health and Development Caraga	DOH
Dr Maria	Axibol	Board Member		PCAHO
Dr Mila M	Bacus	Regional Director	Center for Health and Development VIII	DOH
Dr Eduardo	Banzon	Senior Vice President	Benefits Development	Philippine Health Insurance Corporation
Dr Teresita	Bonoan	Regional Director	Center for Health and Development CAR	DOH
Dr Myrna	Cabotaje	Chairman	Sentrong Sigla Standards Development Task Force	Department of Health
Ms Christina	Coalin	Board Member		PCAHO
Dr Richard	Cortez	Board Member		PCAHO
Dr Conrado	Crisostomo	Chairman and Owner	Board of Directors	Our Lady of the Pillar Hospital, Imus, Cavite
Dr Cristina	Cruz	Director	Mary Immaculate Hospital	Pasig City
Dr Victoria	Dalay	Director	Tuberculosis Research Unit and TB DOTS Center	De La Salle University
Ms Julita	Dayandayan	Board Member		PCAHO
Ms Jocelyn	delos Reyes	General Manager		TUV Suddeutschland
Ms Anesia	Dionisio	Board Member		PCAHO
Dr Ester	Estrellado	Member	Board of Directors	Molino Doctors Hospital
Dr Blanche	Flores	Department of Health Representative and Director	TB DOTS Center	Oroquieta City, Misamis Occidental
Dr. Angeles	Hernandez	Chief Health Program Officer	Community Health Development	Department of Health
Dr Arvin	Marbibi	General Practitioner and Clinic Owner	TS Cruz Clinic	Las Pinas
Engr Francis	Montillano	Owner	Montillano Clinics	Alabang

Dr Tomas	Moramba	Chairman & Board Member		PCAHO
Dr Ethelyn	Nieto	Regional Director	Center for Health and Development IV	DOH
Dr Beauty	Palongpalong	Medical Officer VII	Quality Assurance & Monitoring	Department of Health
Dr Juan	Perez	Chief of Party		PhilTIPS
Dr Alma	Porciuncula	Deputy Chief of Party		PhilTIPS
Ms Emily A.	Razal	Systems Analyst	Information Management Service	Department of Health
Dr Rodrigo	Romulo	Technical Coordinator		PhilTIPS
Dr Elizabeth	Saulog	General Practitioner and Clinic Owner	Imus	Cavite
Ms Charity L.	Tan	Project Manager	Information Management Service	Department of Health
Dr. Nelia	Tanio	Officer-in-Charge	Accreditation Department	PhilHealth
Dr Madeleine M	Valera	Vice President	Quality Assurance Research and Policy Development Group	Philippine Health Insurance Corporation
Dr Marilyn	Yap	Board Member		PCAHO
Dr Charles	Yu	Executive Director		PhilCAT

APPENDIX C - RECOMMENDED POSITION DESCRIPTION FOR PROFESSIONAL STAFF

Position Title: Program Manager, Standards and Certification

Reports To: Executive Officer

Location: Building Room Number

Local Background and Environment
History and purpose of the certification organization

Mission statement

Values

Organizational goals

Key Internal and External Relationships
The Program Manager will be required to establish and maintain relationships across a range of partners and stakeholders including the following:

- List

Main Purpose of Position
Reporting to the Executive Officer, the Program Manager is responsible for the co-ordination and efficient management of the certification organization's standards and TB DOTS center certification program. The Program Manager acts as the link between all stakeholders that participate in or are affected by the certification process and is responsible for promoting interest and enthusiasm in this diverse group of stakeholder.

The Program Manager is accountable for the efficient and effective operation of the certification program utilizing a high degree of autonomy and personal initiative.

The Program Manager is required to provide accurate and timely advice and recommendation on issues including the development and ongoing review of key policies, precedents and practices that form the basis of the operation of this certification program.

The Program Manager plays a significant role in the development of the program budget, monitoring of expenditure and reporting to the Executive Officer.

The Program Manager is responsible for the co-ordination, ongoing training and deployment of the certification surveyors. The Program Manager is also responsible for management of databases to facilitate the timetabling of surveys and negotiation with TB DOTS centers to confirm dates and surveyors.

The Program Manager is expected to understand of the nature of the Philippine health care system and the importance of TB control in the Philippines. In addition, an understanding of best practice in TB DOTS is necessary.

This is a full time permanent position. Out of hours work and travel may be required as part of this position.

Organisational Chart

Key Roles and Responsibilities

Leadership and Stakeholder support

- Provide policy advice on standards and certification.
- Manage all secretariat functions of the certification decision-making committee – schedule meetings; draft agenda papers in consultation with the committee chair; ensure accurate minutes are recorded; act on meeting decisions as agreed; draft correspondence for the Chair as required.
- Prepare, collect, collate, analyze and present information as executive summaries or background papers on matters relating to the certification program.
- Draft and or revise certification organization publications, manuals and documents.
- Coordinate all aspects of surveyor participation in the certification program, including: recruitment; scheduling and coordinating the training program; deploy survey teams; management of the databases that link surveyors and surveys and their outcomes.
- Review, update and monitor performance to operational and strategic plans.
- Liaise regularly and support the TB DOTS centers as they prepare for certification.

Data Collection and Maintenance

- Ensure quality data is available, including surveyor contact details, and the current and historical certification status of all certified TB DOTS centers.
- Ensure data files comply with policies regarding data storage, management, access and disposal.

Financial / Legal Role

- Draft the program's annual budget in consultation with the Executive Officer.
- Ensure that annual expenditure on is within budget.
- Review monthly budget reports.
- Ensure that expenditure complies with all statutory financial requirements.
- Support the certification organization in meeting its obligations under relevant legislation regarding occupation health and safety, discrimination and smoke free workplace.

Human Resources and Teamwork

- Participate in the development of policies relevant to staff including flexible work practice, performance appraisals etc.

Project Manager

- Draft tender documentation for negotiation of tender terms and conditions.
- Draft project plans as required, including timeline, milestones and evaluation procedures.
- Implement, monitor and report on project progress to plans and ensure projects meet agreed milestones.
- Draft, manage and monitor project budgets to ensure efficient effective financial management consistent with legal requirements.
- Plan and undertake evaluations of projects, reporting as appropriate.
- Coordinate and manage records and files of the process and project.

Skills and Competencies Required:

- A commitment to support the goals and mission of the Postgraduate Medical Council, as determined by Executive
- Ability to provide high level secretariat support to committees and chairs
- Ability to implement new projects as decided by the Standards and Accreditation Committee
- Ability to work within a team and independently
- Ability to deal sensitively with confidential information
- Excellent organisational and administration skills
- Diplomacy
- Good interpersonal skills
- Attention to detail
- Ability to prioritise
- Flexibility
- Ability to meet deadlines
- Proven negotiation skills
- Planning experience
- Project management skills
- Proven analytical abilities
- Effective problem solving and time management skills
- High level written and verbal communication skills
- Appropriate management of correspondence and enquiries
- Public relations ability - to promote a positive and professional image of Council at all times.
- High level competence in the use of Microsoft Office 2000 word-processing, spreadsheet, database and presentations software
- Understanding of NSW health system, and medical workforce issues
- Availability for after hours committee work

APPENDIX D- CORE COMPETENCIES FOR CERTIFICATION SURVEYORS

The following skills are recommended as the core competencies for certification surveyors:

1. Surveying skills
   - Ability to apply the standards objectively and reliably
   - To make accurate and nonjudgmental observations
   - To probe during in depth interviews of key informants
   - To systematically review documents
2. Strategic View
   Certification surveyors must:
   - understand and support the purpose and mission of the certification organization;
   - demonstrate an ability to make judgments based on certification organization strategic goals and directions; and
   - understand the political and social environment of health care quality improvement, education and service delivery in the Philippines.
3. Human Relation Skills
   Certification surveyors must be proficient in a range of HR skills including:
   - Communication skills →
     - ability to communicate effectively orally and in writing
     - correctness of presentation and attention to detail
     - listening to and understanding others
   - Representation skills →
     - ability to represent the certification organization before a range of audiences
     - ability to present and explain certification organization values and the certification standards and criteria
   - Leadership skills →
     - create and work within teams
     - delegate as appropriate
     - supervise and train other certification surveyors to undertake surveys for the certification organization
   - Interpersonal, negotiation and conflict resolution skills →
     - ability to deal with people and issues
     - ability to identify acceptable solutions in situations of conflict
     - ability to achieve certification organization objectives and resolve conflict
4. Conceptual, Analytical and Creative Skills
   Certification surveyors must have the capacity to:
   - apply the certification organization standards and criteria accurately; and
   - identify problems in the application of the standards and criteria.
5. Adaptability
   Certification surveyors must be adaptable and able to:
   - modify their approach to different people and situations; and
   - deal with the pressures of timelines, ambiguity and change.
6. Achievement Orientation
   Certification surveyors must:

- accept the need to work to a timetable and deadlines;
- accept high level responsibility for completion of tasks; and
- maintain their skills and understanding of the certification standards and criteria and the organization's processes

APPENDIX E - CODE OF CONDUCT FOR CERTIFICATION SURVEYORS

The following Code of Conduct for certification surveyors is recommended for adoption by the certification organization.

****

DRAFT CODE OF CONDUCT FOR CERTIFICATION SURVEYORS

[The Code of Conduct should begin with a short paragraph on the role of the accreditation organization and the importance of certification as a means for improving the care provided to Filipinos with tuberculosis.]

Certification surveyors are the representatives of the certification organization and are given almost unlimited access to the TB DOTS center. Certification surveyors should acknowledge this by:

1. Being acutely aware of the privileges extended to them;
2. Maintaining the confidentiality of information obtained about the TB DOTS center;
3. Respecting matters of patient privacy and confidentiality;
4. Acting as ambassadors for the certification organization;
5. Being courteous and diplomatic;
6. Being impartial, fair and objective;
7. Avoiding any conflict of interest situations (this includes not promoting oneself to the health facility to undertake additional work);
8. Maintaining professional standards of dress and behavior and wearing the certification organization identification badge when undertaking a survey;
9. Respecting the health facility's 'in-house' rules with regard to matters such as smoking and the use of mobile telephones;
10. Taking from the TB DOTS center only those documents, including photocopies, for which clearance has been obtained from the TB DOTS center;
11. Generally encouraging and educating TB DOTS centers in their pursuit of quality activities and continuous improvement; and
12. Giving appropriate attention to the survey process and minimizing disruption and time spent on issues relating to one's own employment.

In addition, certification surveyors have responsibilities to the certification organization. These responsibilities form the basis of the evaluation of surveyor performance and include:

1. Keeping your knowledge of TB DOTS methodology, the Philippine health care system, clinical practice, quality activities, management strategies, new standards and criteria and other relevant topics up to date;
2. Maintaining your commitment to undertake *x* days of surveying per year;
3. Attending the bi-annual certification organization continuing education program;
4. Submitting accurate, well-written survey reports to the certification organization within the allocated time;
5. Being a team leader of a survey when requested once suitably experienced and trained; and
6. Limiting expenses payable by the certification organization / TB DOTS center to reasonable levels.

Certification surveyors who accept the work of participating in TB DOTS center surveys as a privilege and who observe this code of conduct will find the survey process to be rewarding and a means of expanding their own knowledge of health care practices.

Adherence to the Code of Conduct is fundamental to the integrity of the certification organization. The certification organization reserves the right to terminate the appointment of a certification surveyor found in breach of the Code of Conduct.

Signed_____ Date_____
Certification Surveyor

Signed_____ Date_____
for the Certification Organization

APPENDIX F - DEPARTMENT OF HEALTH INFORMATION REQUIREMENTS

The Manual of Procedure for the National Tuberculosis Control Program requires certified TB DOTS centers to maintain the following sets of data in the pre-determined formats:

- NTP Laboratory Request Form for Sputum Examination
- NTP Laboratory Register
- NTP Treatment Card
- NTP Identification Card
- TB Register
- NTP Referral/Transfer Form

The Manual of Procedure for the National Tuberculosis Control Program also requires certified TB DOTS centers to provide the following sets of data to the Department of Health in the pre-determined formats:

- Quarterly Report on NTP Laboratory Activities
- Counting Sheet for Laboratory Activities Report
- Quarterly Report on New Cases and Relapses of Tuberculosis and on Drug Inventory Requirement
- Counting Sheet for Case Finding by Types / Drug Inventory
- Quarterly Report on Treatment Outcome of Pulmonary TB Cases Registered 13-15 Months Earlier
- Counting Sheet for Quarterly Report on the Treatment Outcome of Pulmonary TB Cases

In addition to the Department of Health requirements, the certified TB DOTS center will need to provide the following information to PhilHealth in order to complete the accreditation process:

- PhilHealth application form properly accomplished and notarized
- Certification from PhilCAT
- Certification from NTP as TB Microscopy Center
- Mayor's permit
- Complete list of staff with respective designations
- List of equipment and supplies
- List of available drugs and quantity in the DOTS Center
- Current photographs of DOTS Clinic façade and other facilities (optional)
- Current photographs of complete Clinic staff
- MOA with a PhilHealth Accredited Center with x-ray facility, if without x-ray facility
- MOA with a microscopy center, if without laboratory facility
- Remittance Form I (RF-I)
- Proof of Quality Assurance activities
- A computer and an Internet connection
- Accreditation Fee (P1,000) by postal money order payable to PhilHealth or cash paid directly to the PhilHealth cashier. The Accreditation fee is non-refundable.
- The NTP Card for each patient will be submitted to PhilHealth at the start and at the end of treatment and a TB registry of the DOTS-Center will also be submitted to PhilHealth for reimbursement purposes.

APPENDIX G - OPERATIONS MANUAL HEADINGS AND SUB-HEADINGS

The following headings are recommended to give guidance for the operation of a TB DOTS center certification program. They are given in three sections.

The Certification Process

1. Entry into the certification program
   - 1.1 Informed decision
     - 1.1.1 Eligibility criteria
     - 1.1.2 Compliance with relevant provisions of the certification program
     - 1.1.3 Arrangements for the survey
     - 1.1.4 The standards
   - 1.2 Application for certification
     - 1.2.1 Application form
     - 1.2.2 Compliance arrangements
     - 1.2.3 Payment of fees (contract)
2. Communication with applicants
   - 2.1 Assistance to prepare for and maintain certification
   - 2.2 Advisory services (scope)
   - 2.3 Interpretation of standards
3. Self-assessment
   - 3.1 Guidance in self-assessment
   - 3.2 Submission of self-assessment
   - 3.3 Evaluation of self-assessment
     - 3.3.1 Evaluation criteria
     - 3.3.2 Evaluation outcomes
4. Planning for survey
   - 4.1 Nature and extent of survey
   - 4.2 Date, time and duration
   - 4.3 Sequence of activities
   - 4.4 Documents
   - 4.5 Selecting surveyors
     - 4.5.1 Balance of skills
     - 4.5.2 Conflicts of interest
     - 4.5.3 Economic considerations
5. Conduct of on-site certification survey
   - 5.1 General rules and procedures
   - 5.2 Interviews of personnel and patients
   - 5.3 Document reviews
   - 5.4 Observation of key processes
   - 5.5 Ratings and interpretation of standards
   - 5.6 Exit conference
6. Post survey
   - 6.1 Report structure
   - 6.2 Rating
   - 6.3 Evaluation of process

The Integrity of the Certification Decision

1. Rating and Scoring
   - 1.1 Objectivity and subjectivity
   - 1.2 Inter-rater reliability

1.3 Certification decision

   - 1.4 Decision-making rules
   - 1.5 Decision-making committee

2. Appeals
3. Accreditation decision
   - 3.1 The certification rules and interaction with PhilHealth
   - 3.2 Relation between certification and accreditation

Human Resources

1. Certification surveyors
   - 1.1 Recruitment
   - 1.2 Selection
   - 1.3 Terms of engagement
     - 1.3.1 Contract
     - 1.3.2 Code of conduct
     - 1.3.3 Remuneration
   - 1.4 Training and development
   - 1.5 Deployment
   - 1.6 Performance management
   - 1.7 OH&S
2. Technical support and management staff
   - 2.1 Recruitment
   - 2.2 Selection
   - 2.3 Scope of competence
   - 2.4 Terms of engagement
   - 2.5 Training and development
   - 2.6 Deployment
   - 2.7 Performance management
   - 2.8 OH&S

APPENDIX H - ANALYSIS OF COSTS AND REVENUES (1350 CERTIFICATIONS BREAK-EVEN)

Start-up costs

Rental	
Deposit (3-month rentals)	126,000
Advance (3-month rentals)	126,000
Renovation costs	1,440,000
Office equipment	271,000
Office furnitures	95,000
Pre-deployment training and workshops	805,000
Development of systems and procedures	100,000
Cash operating expenses for first 6 months	1,715,000
Provision for contingencies at 10% of the above	467,800
TOTAL	5,145,800

Income Statement

	1st year	2nd year	3rd year	4th year	5th year
Revenues	2,700,000	10,395,000	19,806,188	31,177,594	28,483,846
Expenses					
Personnel					
Surveyors	180,000	594,000	1,099,890	1,710,721	1,356,377
Staff	960,000	2,112,000	3,484,800	4,472,160	4,472,160
Training and development	805,000	605,000	1,337,050	1,031,525	768,615
Travel and transportation	180,000	594,000	1,099,890	1,710,721	1,356,377
Board and lodging	36,000	118,800	219,978	342,144	271,275
Marketing and promotions	270,000	594,000	980,100	1,437,480	594,000
Rentals	504,000	554,400	609,840	670,824	737,906
Supplies and materials	135,000	297,000	490,050	718,740	297,000
Telephone and communication	60,000	66,000	72,600	79,860	87,846
Insurance, repairs and maintenanc	60,000	66,000	72,600	79,860	87,846
Water and power	240,000	264,000	290,400	319,440	351,384
Depreciation	361,200	361,200	361,200	361,200	361,200
Total	3,791,200	6,226,400	10,118,398	12,934,675	10,741,988
Net revenues	(1,091,200)	4,168,600	9,687,790	18,242,918	17,741,858

Summary of start-up costs and expenses for the 5-year period

Start-up costs	5,145,800
Expenses for the 5-year period	
1st	3,791,200
2nd	6,226,400
3rd	10,118,398
4th	12,934,675
5th	10,741,988
	48,958,461
Targeted number of centers to be certified over the 5-year period	1,350
Average costs per center or break even for the 5-year period	**36,266**

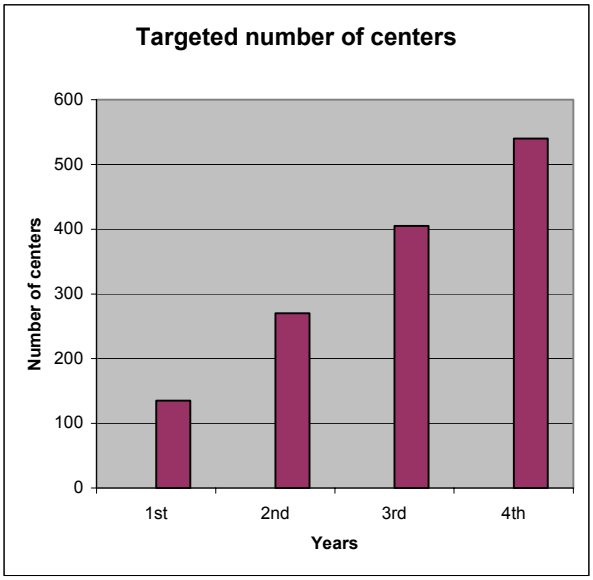
Basic Assumptions:

1. Number of centers to be certified over a 4-year period — 1,350

> The number of centers targeted to be certified is from a base figure of 1,800 TB DOTS center nationwide. The target is comprising 75% of the total.

2. Targeted number of certified centers, over the 4-year period

Years	No. of centers	As % of total
1st	135	10%
2nd	270	20%
3rd	405	30%
4th	540	40%



3. Number of certification teams, number of surveyors and total surveyor/days

Length of time to complete one certification process — 0.67 day

> Premised on physically dispersed surveyor workforce

No. of centers completed in one day — 1.5 centers

Availability of surveyors/teams per year — 10 days

Composition of certification team — 2 surveyors

Validity period of certification

> 1st certification: 12 months

> 2nd and subsequent certifications: 3 years, with annual "desk" audits after 12 months and 24 months

Re-survey of certified centers due to failure in annual audit

> Failure rates

1st annual audit	5%
2nd annual audit	4%

> Effect of failure in annual audit

Forfeits remaining 24 months or 12 months, as the case may be, of the period of certification

Kicks-up the re-survey of the particular certified centers

> Re-certified centers to be granted 3-year certifications, with annual "desk" audits after 12 months and 24 months

Survey, re-survey and audit schedules for the targeted number of certified centers

	1st year	2nd year	3rd year	4th year	5th year
Survey					
1st year target	135	135	0	0	123
2nd year target	0	270	270	0	0
3rd year target	0	0	405	405	0
4th year target	0	0	0	540	540
Sub-total	135	405	675	945	663
Re-survey					
1st year target	0	0	7	5	0
				0	0
					0
2nd year target	0	0	0	14	10
					1
3rd year target	0	0	0	0	20
4th year target	0	0	0	0	0
Sub-total	0	0	7	19	32
Total number of centers surveyed and re-surveyed for the year	135	405	682	964	695

Audit					
1st year target	0	0	135	135	12
2nd year target	0	0	0	270	270
3rd year target	0	0	0	0	405
4th year target	0	0	0	0	0
Total number of centers audited for the year	0	0	135	405	687

Total number of surveyor/days used per year

Years	No. of days per year to complete certification schedule	Actual no. of certification teams	Actual no. of surveyors	Total no. of surveyor/days per year
1st	90	9	18	180
2nd	270	27	54	540
3rd	455	45	91	909
4th	643	64	129	1,285
5th	463	46	93	926

4. Training and development of surveyors

Induction-training programs for new surveyors

> Two-day live-in training in Metro Manila

	1st year	2nd year	3rd year	4th year	5th year
Targeted number of surveyors trained for the certification process	45	75	120	150	0
Number of new surveyors	45	30	45	30	0

Continuing education seminars

> One-day seminars in Metro Manila and designated regional venues

> Seminars to be conducted 2 years after anniversary date of initial training program

	1st year	2nd year	3rd year	4th year	5th year
Number of surveyors	0	0	45	30	90

5. Office staff

Administrative activities of office staff	Days / year
Corporate administrative functions	30
Operational management & planning	
Strategic planning	
Financial management	
Quality assurance	
Board meetings	
Development of resource materials	15
Education	
Marketing	
Surveyor training & support	5
Advocacy	10
Personal professional development	5
Total	65

Days available for survey and audit activities

Net number of days available per year		
Days in a year		365
Less		
Weekends	104	
Public holidays	16	
Vacation	15	
Sickness and other absences	5	
Administrative activities	65	205
Total		160

Survey activities per professional staff

	Range of hours spent	
Booking survey with TB DOTS center	0.50	1.00
TB DOTS center support	1.00	3.00
Manage self-assessment	0.50	1.00
Book surveyors x2	0.50	1.00
Book transport, etc	1.00	1.00
Post survey support	0.25	1.00
Manage post-survey documentation	0.50	1.00
Notify results (PhilHealth & TB DOTS centre)	0.25	0.50
	4.50	9.50

Average time spent per survey 7.00 hours

Audit activities per professional staff

Average time spent per audit	4 hours

Summary - Number of professional staff to be hired on full-time basis

	1st year	2nd year	3rd year	4th year	5th year
Per professional staff, days available for survey, re-survey and audit activites	160	160	160	160	160
Working hours per day	8	8	8	8	8
Total hours available for survey, re-survey and audit activities	1,280	1,280	1,280	1,280	1,280

Total number of hours required for survey and re-survey activities, per number of centers targeted for the year	945	2,835	4,772	6,748	4,864
Total number of hours allocated for audit activities	0	0	540	1,620	2,748
Grand total number of hours for survey and audit activities	945	2,835	5,312	8,368	7,611
Equivalent number of professional staff to be hired for the year	1	2	4	7	6

> Equivalent number of professional staff to hired computed as theoretical basis for the final manpower complement. Staffing for the final manpower complement will differ to consider other matters related to office procedures.

Number of administrative staff to be hired on a full time basis

> Ratio of 1 administrative staff for every 2 professional staff

Final manpower complement

Years	Professionals	Administrative
1st	2	1
2nd	4	2
3rd	6	3
4th	7	4
5th	7	4

6. Office space requirements

As programmed (in square meters)

Dimension for the certification team	3 x 3
Dimension of the training room	5 x 6
Requirement for the staff	4 square meters per staff
Dimension for the executive	4 x 5

Years	Certification team	Training	Staff area	Executive area	Total area
1st	9	30	12	20	71
2nd	9	30	24	20	83
3rd	9	30	36	20	95
4th	9	30	42	20	101

Office space requirement, as implemented

Area to be leased (in square meters)	120
Rental cost per month (PhP)	350
Monthly rental cost	42,000
Renovation costs per square meter (PhP)	12,000
> All-inclusive costs per square meter based on currently prevailing industry standards.	
Total renovation costs	1,440,000

7. Office equipment, 1st year

Particulars	Qtty.	Unit cost	Total costs
Telephone system	1	50,000	50,000
Computers	2	30,000	60,000
Server	1	100,000	100,000
LaserJet printer	2	12,000	24,000
Fax machine	1	7,000	7,000
Photocopier	1	30,000	30,000
Total			271,000

8. Office furniture, 1st year

Particulars	Qtty.	Unit cost	Total costs
Executive area			
Executive table	1	10,000	10,000
Executive chair	1	4,000	4,000
Visitors' chairs	4	3,000	12,000
Back cabinet	1	6,000	6,000
Book cabinet	1	6,000	6,000
Waiting area furniture	1	20,000	20,000
Certification team			
Office tables	1	3,000	3,000
Office chairs	1	2,000	2,000
Clerical tables	1	3,000	3,000
Clerical chairs	1	1,000	1,000
Training area			
Conference table with 12 chairs (set)	1	20,000	20,000
Staff area			
Clerical tables	2	3,000	6,000
Clerical chairs	2	1,000	2,000
Total			95,000

9. Revenues

a. Fee structure per certification, escalation rate (10% per annum

> Based on current economic indicators, inflation rate is below 5%. For purposes however of business modelling, a 10% escalation rate is being used for conservatism and to input the specialized nature of revenues and expenses in the healthcare industry.

Initial certification

Application fee, payable upoon filing of the application for certification	5,000
Survey fee, payable upon designation of the survey team	15,000
Total	20,000

	1st year	2nd year	3rd year	4th year	5th year
Schedule of fees	20,000	22,000	24,200	26,620	29,282

Second and subsequent certifications

Application fee, payable upoon filing of the application for certification		5,000
Survey fee, payable upon designation of the survey team		15,000
Annual audit fee for two years, payable together with survey f	5,000	10,000
Total		30,000

	1st year	2nd year	3rd year	4th year	5th year
Schedule of fees	30,000	33,000	36,300	39,930	43,923

Re-certification for centers who failed in annual audits

Re-survey fee, payable upon designation of the survey team		15,000
Annual audit fee for two years, payable together with survey f	5,000	10,000
Total		25,000

	1st year	2nd year	3rd year	4th year	5th year
Schedule of fees	25,000	27,500	30,250	33,275	36,603

b. Schedule of revenues

	1st year	2nd year	3rd year	4th year	5th year
Initial certification	2,700,000	5,940,000	9,801,000	14,374,800	3,605,200
Second certification	0	4,455,000	9,801,000	16,171,650	23,718,420
Re-certification	0	0	204,188	631,144	1,160,226
Total	2,700,000	10,395,000	19,806,188	31,177,594	28,483,846

10. Expenses

	1st year	2nd year	3rd year	4th year	5th year
Personnel					
Surveyors					
Rate per surveyor/day	1,000	1,100	1,210	1,331	1,464
Annual cost	180,000	594,000	1,099,890	1,710,721	1,356,377
Staff					
Monthly rate per professional, inclusive of benefits	30,000	33,000	36,300	39,930	43,923
Monthly rate per administrative staff, inclusive of benefits	20,000	22,000	24,200	26,620	29,282
Annual cost					
Professional	720,000	1,584,000	2,613,600	3,354,120	3,354,120
Clerical	240,000	528,000	871,200	1,118,040	1,118,040
Training and development					
Training for new surveyors					
Honorarium, at regular rate per surveyor/day	90,000	66,000	108,900	79,860	0
Trainor's fees and expenses, at PhP20,000/day and escalating at 10% per annum	40,000	44,000	48,400	53,240	0
Venue, board and lodging, at PhP5,000/head /day and escalating at 10% per annum	450,000	330,000	544,500	399,300	0

Transportation. at PhP5,000 per head and escalating at 10% per annum	225,000	165,000	272,250	199,650	0
Sub-total	805,000	605,000	974,050	732,050	0
Continuing education seminars					
Honorarium, at regular rate per surveyor/day	0	0	54,450	39,930	131,769
Trainor's fees and expenses at 3 locations, at PhP25,000/day / location and escalating at 10% per annum	0	0	90,750	99,825	109,806
Venue, at PhP2,000/head and escalating at 10% per annum	0	0	108,900	79,860	263,520
Transportation. at PhP2,000 per head and escalating at 10% per annum	0	0	108,900	79,860	263,520
Sub-total	0	0	363,000	299,475	768,615
Annual costs	805,000	605,000	1,337,050	1,031,525	768,615
Travel and transportation					
Rate per day	2,000	2,200	2,420	2,662	2,928
Annual costs	180,000	594,000	1,099,890	1,710,721	1,356,377

Board and lodging					
Meal allowance per day	200	220	242	266	293
Room rate for the 10% needing overnight stay	2,000	2,200	2,420	2,662	2,928
Annual costs	36,000	118,800	219,978	342,144	271,275
Marketing and promotions					
Budget per center	2,000	2,200	2,420	2,662	2,928
Annual costs	270,000	594,000	980,100	1,437,480	594,000
Rentals					
Annual costs	504,000	554,400	609,840	670,824	737,906
Supplies and materials					
Budget per center	1,000	1,100	1,210	1,331	1,464
Annual costs	135,000	297,000	490,050	718,740	297,000
Telephone and communication expenses					
Monthly budget	5,000	5,500	6,050	6,655	7,321
Annual costs	60,000	66,000	72,600	79,860	87,846
Insurance, repairs and maintenance					
Monthly budget	5,000	5,500	6,050	6,655	7,321
Annual costs	60,000	66,000	72,600	79,860	87,846
Water and power					
Monthly budget	20,000	22,000	24,200	26,620	29,282
Annual costs	240,000	264,000	290,400	319,440	351,384
Depreciation					
Annual expense	361,200	361,200	361,200	361,200	361,200

APPENDIX I - ANALYSIS OF COSTS AND REVENUES (150 CERTIFICATIONS FIXED PRICING)

Start-up costs

Rental	
Deposit (3-month rentals)	105,000
Advance (3-month rentals)	105,000
Renovation costs	1,200,000
Office equipment	271,000
Office furnitures	95,000
Pre-deployment training and workshops	295,000
Development of systems and procedures	100,000
Cash operating expenses for first 6 months	1,151,833
Provision for contingencies at 10% of the above	332,283
TOTAL	3,655,117

Income Statement

	1st year	2nd year	3rd year	4th year	5th year
Revenues	400,000	1,210,000	1,663,750	2,198,147	3,337,434
Expenses					
Personnel					
Surveyors	26,667	66,000	90,347	119,009	187,070
Staff	960,000	1,056,000	1,161,600	1,277,760	1,405,536
Training and development	445,000	489,500	647,350	712,085	483,144
Travel and transportation	26,667	66,000	90,347	119,009	187,070
Board and lodging	5,333	13,200	18,069	23,802	37,414
Marketing and promotions	40,000	55,000	72,600	93,170	117,128
Rentals	420,000	462,000	508,200	559,020	614,922
Supplies and materials	20,000	27,500	36,300	46,585	58,564
Telephone and communication	60,000	66,000	72,600	79,860	87,846
Insurance, repairs and maintenanc	60,000	66,000	72,600	79,860	87,846
Water and power	240,000	264,000	290,400	319,440	351,384
Depreciation	313,200	313,200	313,200	313,200	313,200
Total	2,616,867	2,944,400	3,373,613	3,742,800	3,931,124
Net revenues	(2,216,867)	(1,734,400)	(1,709,863)	(1,544,654)	(593,690)

Summary of start-up costs and expenses for the 5-year period

Start-up costs	3,655,117
Expenses for the 5-year period	
1st	2,616,867
2nd	2,944,400
3rd	3,373,613
4th	3,742,800
5th	3,931,124
	20,263,920
Targeted number of privately-owned centers to be certified over the 5-year period	150
Average costs per center or break even for the 5-year period	**135,093**

Basic Assumptions:

1. Number of privately-owned centers to be certified over a 5-year period: 150

2. Targeted number of certified centers, over the 5-year period

Years	No. of centers
1st	20
2nd	25
3rd	30
4th	35
5th	40

3. Number of certification teams, number of surveyors and total surveyor/days

Length of time to complete one certification process: 0.67 day
> Premised on physically dispersed surveyor workforce

No. of centers completed in one day: 1.5 centers

Availability of surveyors/teams per year: 10 days

Nationwide pool of surveyors to be organized

Number of regions	15
Number of surveyors per region	4
Total number of surveyors nationwide	60

Schedule of formation

Years	No. of surveyors
1st	15
2nd	15
3rd	15
4th	15

> Basic intention in the schedule of formation is to have one surveyor per regi
in the abasence of prioritization per region. The number of surveyors
works as a pool as it is presumed that not all of them will be available as needed.

Composition of certification team: 2 surveyors

Validity period of certification
> 1st certification: 12 months
> 2nd and subsequent certifications: 3 years, with annual "desk" audits after 12 months and 24 months

Re-survey of certified centers due to failure in annual audit

> Failure rates

1st annual audit	5%
2nd annual audit	4%

> Effect of failure in annual audit

Forfeits remaining 24 months or 12 months, as the case may be, of the period of certification

Kicks-up the re-survey of the particular certified centers

> Re-certified centers to be granted 3-year certifications, with annual "desk" audits after 12 months and 24 months

Survey, re-survey and audit schedules for the targeted number of certified centers

	1st year	2nd year	3rd year	4th year	5th year
Survey					
1st year target	20	20	0	0	18
2nd year target	0	25	25	0	0
3rd year target	0	0	30	30	0
4th year target	0	0	0	35	35
5th year target	0	0	0	0	40
Sub-total	20	45	55	65	93
Re-survey					
1st year target	0	0	1	1	0
				0	0
					0
2nd year target	0	0	0	1	1
					0
3rd year target	0	0	0	0	2
4th year target	0	0	0	0	0
5th year target	0	0	0	0	0
Sub-total	0	0	1	2	3
Total number of centers surveyed and re-surveyed for the year	20	45	56	67	96
Audit					
1st year target	0	0	20	20	2
2nd year target	0	0	0	25	25
3rd year target	0	0	0	0	30
4th year target	0	0	0	0	0
5th year target	0	0	0	0	0
Total number of centers audited for the year	0	0	20	45	57

Total number of surveyor/days used per year

Years	No. of days per year to complete certification schedule	No. of certification teams	No. of surveyors	Total no. of surveyor/days per year
1st	13	1	3	27
2nd	30	3	6	60
3rd	37	4	7	75
4th	45	4	9	89
5th	64	6	13	128

4. Training and development of surveyors

Induction-training programs for new surveyors

> Two-day live-in training in Metro Manila

	1st year	2nd year	3rd year	4th year	5th year
Number of new surveyors	15	15	15	15	0

Continuing education seminars

> One-day seminars in Metro Manila and designated regional venues

> Seminars to be conducted every six months

	1st year	2nd year	3rd year	4th year	5th year
Number of surveyors	0	0	15	15	30

5. Office staff

Administrative activities of office staff	Days / year
Corporate administrative functions	30
Operational management & planning	
Strategic planning	
Financial management	
Quality assurance	
Board meetings	
Development of resource materials	15
Education	
Marketing	
Surveyor training & support	5
Advocacy	10
Personal professional development	5
Total	65

Days available for survey and audit activities		
Net number of days available per year		
Days in a year		365
Less		
Weekends	104	
Public holidays	16	
Vacation	15	
Sickness and other absences	5	
Administrative activities	65	205
Total		160

Survey activities per professional staff

	Range of hours spent	
Booking survey with TB DOTS center	0.50	1.00
TB DOTS center support	1.00	3.00
Manage self-assessment	0.50	1.00
Book surveyors x2	0.50	1.00
Book transport, etc	1.00	1.00
Post survey support	0.25	1.00
Manage post-survey documentation	0.50	1.00
Notify results (PhilHealth & TB DOTS centre)	0.25	0.50
	4.50	9.50

Average time spent per survey 7.00 hours

Audit activities per professional staff

Average time spent per audit	4 hours

Summary - Number of professional staff to be hired on full-time basis

	1st year	2nd year	3rd year	4th year	5th year
Per professional staff, days available for survey, re-survey and audit activites	160	160	160	160	160
Working hours per day	8	8	8	8	8
Total hours available for survey, re-survey and audit activities	1,280	1,280	1,280	1,280	1,280
Total number of hours required for survey and re-survey activities, per number of centers targeted for the year	140	315	392	469	671
Total number of hours allocated for audit activities	0	0	80	180	227
Grand total number of hours for survey and audit activities	140	315	472	649	898
Equivalent number of professional staff to be hired for the year	0	0	0	1	1

Notes: For the first three years, the equivalent number of professional staff is less than half. It is then rounded up to 0. However, for purposes of staffing it shall be considered as 1. Despite redundancy, 2 professional staff shall be hired.

Number of administrative staff to be hired on a full time basis

> Ratio of 1 administrative staff for every 2 professional staff

Final manpower complement

Years	Professionals	Administrative
1st	2	1
2nd	2	1
3rd	2	1
4th	2	1
5th	2	1

6. Office space requirements

As programmed (in square meters)

Dimension for the certification team	3 x 3
Dimension of the training room	5 x 6
Requirement for the staff	4 square meters per staff
Dimension for the executive	4 x 5

Years	Certification team	Training	Staff area	Executive area	Total area
1st	9	30	12	20	71
2nd	9	30	12	20	71
3rd	9	30	12	20	71
4th	9	30	12	20	71

Office space requirement, as implemented

Area to be leased (in square meters)	100
Rental cost per month (PhP)	350
Monthly rental cost	35,000
Renovation costs per square meter (PhP)	12,000
Total renovation costs	1,200,000

> All-inclusive costs per square meter based on currently prevailing industry standards.

7. Office equipment, 1st year

Particulars	Qtty.	Unit cost	Total costs
Telephone system	1	50,000	50,000
Computers	2	30,000	60,000
Server	1	100,000	100,000
LaserJet printer	2	12,000	24,000
Fax machine	1	7,000	7,000
Photocopier	1	30,000	30,000
Total			271,000

8. Office furniture, 1st year

Particulars	Qtty.	Unit cost	Total costs
Executive area			
Executive table	1	10,000	10,000
Executive chair	1	4,000	4,000
Visitors' chairs	4	3,000	12,000
Back cabinet	1	6,000	6,000
Book cabinet	1	6,000	6,000
Waiting area furniture	1	20,000	20,000
Certification team			
Office tables	1	3,000	3,000
Office chairs	1	2,000	2,000
Clerical tables	1	3,000	3,000
Clerical chairs	1	1,000	1,000
Training area			
Conference table with 12 chairs (set)	1	20,000	20,000
Staff area			
Clerical tables	2	3,000	6,000
Clerical chairs	2	1,000	2,000
Total			95,000

9. Revenues

a. Fee structure per certification, escalation rate (10% per annum

> Based on current economic indicators, inflation rate is below 5%. For purposes however of business modelling, a 10% escalation rate is being used for conservatism and to input the specialized nature of revenues and espenses in the healthcare industry.

Initial certification

Application fee, payable upoon filing of the application for certification		5,000
Survey fee, payable upon designation of the survey team		15,000
Total		20,000

	1st year	2nd year	3rd year	4th year	5th year
Schedule of fees	20,000	22,000	24,200	26,620	29,282

Second and subsequent certifications

Application fee, payable upoon filing of the application for certification		5,000
Survey fee, payable upon designation of the survey team		15,000
Annual audit fee for two years, payable together with survey f	5,000	10,000
Total		30,000

	1st year	2nd year	3rd year	4th year	5th year
Schedule of fees	30,000	33,000	36,300	39,930	43,923

Re-certification for centers who failed in annual audits

Re-survey fee, payable upon designation of the survey team		15,000
Annual audit fee for two years, payable together with survey f	5,000	10,000
Total		25,000

	1st year	2nd year	3rd year	4th year	5th year
Schedule of fees	25,000	27,500	30,250	33,275	36,603

b. Schedule of revenues

	1st year	2nd year	3rd year	4th year	5th year
Initial certification	400,000	550,000	726,000	931,700	1,705,384
Second certification	0	660,000	907,500	1,197,900	1,537,305
Re-certification	0	0	30,250	68,547	94,746
Total	400,000	1,210,000	1,663,750	2,198,147	3,337,434

10. Expenses

	1st year	2nd year	3rd year	4th year	5th year
Personnel					
Surveyors					
Rate per surveyor/day	1,000	1,100	1,210	1,331	1,464
Annual cost	26,667	66,000	90,347	119,009	187,070
Staff					
Monthly rate per professional, inclusive of benefits	30,000	33,000	36,300	39,930	43,923
Monthly rate per administrative staff, inclusive of benefits	20,000	22,000	24,200	26,620	29,282
Annual cost					
Professional	720,000	792,000	871,200	958,320	1,054,152
Clerical	240,000	264,000	290,400	319,440	351,384
Training and development					
Training for new surveyors					
Honorarium, at regular rate per surveyor/day	30,000	33,000	36,300	39,930	0
Trainor's fees and expenses, at PhP20,000/day and escalating at 10% per annum	40,000	44,000	48,400	53,240	0
Venue, board and lodging, at PhP5,000/head /day and escalating at 10% per annum	150,000	165,000	181,500	199,650	0

Transportation. at PhP5,000 per head and escalating at 10% per annum	75,000	82,500	90,750	99,825	0
Sub-total	295,000	324,500	356,950	392,645	0
Continuing education seminars					
Honorarium, at regular rate per surveyor/day	0	0	36,300	39,930	87,846
Trainor's fees and expenses at 3 locations, at PhP25,000/day / location and escalating at 10% per annum	150,000	165,000	181,500	199,650	219,618
Venue, at PhP2,000/head and escalating at 10% per annum	0	0	36,300	39,930	87,840
Transportation. at PhP2,000 per head and escalating at 10% per annum	0	0	36,300	39,930	87,840
Sub-total	150,000	165,000	290,400	319,440	483,144
Annual costs	445,000	489,500	647,350	712,085	483,144

Travel and transportation					
Rate per day	2,000	2,200	2,420	2,662	2,928
Annual costs	26,667	66,000	90,347	119,009	187,070
Board and lodging					
Meal allowance per day	200	220	242	266	293
Room rate for the 10% needing overnight stay	2,000	2,200	2,420	2,662	2,928
Annual costs	5,333	13,200	18,069	23,802	37,414
Marketing and promotions					
Budget per center	2,000	2,200	2,420	2,662	2,928
Annual costs	40,000	55,000	72,600	93,170	117,128
Rentals					
Annual costs	420,000	462,000	508,200	559,020	614,922
Supplies and materials					
Budget per center	1,000	1,100	1,210	1,331	1,464
Annual costs	20,000	27,500	36,300	46,585	58,564
Telephone and communication expenses					
Monthly budget	5,000	5,500	6,050	6,655	7,321
Annual costs	60,000	66,000	72,600	79,860	87,846
Insurance, repairs and maintenance					
Monthly budget	5,000	5,500	6,050	6,655	7,321
Annual costs	60,000	66,000	72,600	79,860	87,846
Water and power					
Monthly budget	20,000	22,000	24,200	26,620	29,282
Annual costs	240,000	264,000	290,400	319,440	351,384
Depreciation					
Annual expense	313,200	313,200	313,200	313,200	313,200

APPENDIX J - ANALYSIS OF COSTS AND REVENUES (150 CERTIFICATIONS BREAK-EVEN)

Start-up costs

Rental	
Deposit (3-month rentals)	105,000
Advance (3-month rentals)	105,000
Renovation costs	1,200,000
Office equipment	271,000
Office furnitures	95,000
Pre-deployment training and workshops	295,000
Development of systems and procedures	100,000
Cash operating expenses for first 6 months	1,151,833
Provision for contingencies at 10% of the above	332,283
TOTAL	3,655,117

Income Statement

	1st year	2nd year	3rd year	4th year	5th year
Revenues	1,000,000	3,135,000	4,319,700	5,715,580	8,628,227
Expenses					
Personnel					
Surveyors	26,667	66,000	90,347	119,009	187,070
Staff	960,000	1,056,000	1,161,600	1,277,760	1,405,536
Training and development	445,000	489,500	647,350	712,085	483,144
Travel and transportation	26,667	66,000	90,347	119,009	187,070
Board and lodging	5,333	13,200	18,069	23,802	37,414
Marketing and promotions	40,000	55,000	72,600	93,170	117,128
Rentals	420,000	462,000	508,200	559,020	614,922
Supplies and materials	20,000	27,500	36,300	46,585	58,564
Telephone and communication	60,000	66,000	72,600	79,860	87,846
Insurance, repairs and maintenanc	60,000	66,000	72,600	79,860	87,846
Water and power	240,000	264,000	290,400	319,440	351,384
Depreciation	313,200	313,200	313,200	313,200	313,200
Total	2,616,867	2,944,400	3,373,613	3,742,800	3,931,124
Net revenues	(1,616,867)	190,600	946,087	1,972,780	4,697,103

Summary of start-up costs and expenses for the 5-year period

Start-up costs	3,655,117
Expenses for the 5-year period	
1st	2,616,867
2nd	2,944,400
3rd	3,373,613
4th	3,742,800
5th	3,931,124
	20,263,920
Targeted number of privately-owned centers to be certified over the 5-year period	150
Average costs per center or break even for the 5-year period	135,093

Basic Assumptions:

1. Number of privately-owned centers to be certified over a 5-year period: 150

2. Targeted number of certified centers, over the 5-year period

Years	No. of centers
1st	20
2nd	25
3rd	30
4th	35
5th	40

3. Number of certification teams, number of surveyors and total surveyor/days

Length of time to complete one certification process: 0.67 day
> Premised on physically dispersed surveyor workforce

No. of centers completed in one day: 1.5 centers

Availability of surveyors/teams per year: 10 days

Nationwide pool of surveyors to be organized

Number of regions	15
Number of surveyors per region	4
Total number of surveyors nationwide	60

Schedule of formation

Years	No. of surveyors
1st	15
2nd	15
3rd	15
4th	15

> Basic intention in the schedule of formation is to have one surveyor per regi
in the abasence of prioritization per region. The number of surveyors
works as a pool as it is presumed that not all of them will be available as needed.

Composition of certification team: 2 surveyors

Validity period of certification
> 1st certification: 12 months
> 2nd and subsequent certifications: 3 years, with annual "desk" audits after 12 months and 24 months

Re-survey of certified centers due to failure in annual audit

> Failure rates

1st annual audit	5%
2nd annual audit	4%

> Effect of failure in annual audit

Forfeits remaining 24 months or 12 months, as the case may be, of the period of certification

Kicks-up the re-survey of the particular certified centers

> Re-certified centers to be granted 3-year certifications, with annual "desk" audits after 12 months and 24 months

Survey, re-survey and audit schedules for the targeted number of certified centers

	1st year	2nd year	3rd year	4th year	5th year
Survey					
1st year target	20	20	0	0	18
2nd year target	0	25	25	0	0
3rd year target	0	0	30	30	0
4th year target	0	0	0	35	35
5th year target	0	0	0	0	40
Sub-total	20	45	55	65	93
Re-survey					
1st year target	0	0	1	1	0
				0	0
					0
2nd year target	0	0	0	1	1
					0
3rd year target	0	0	0	0	2
4th year target	0	0	0	0	0
5th year target	0	0	0	0	0
Sub-total	0	0	1	2	3
Total number of centers surveyed and re-surveyed for the year	20	45	56	67	96
Audit					
1st year target	0	0	20	20	2
2nd year target	0	0	0	25	25
3rd year target	0	0	0	0	30
4th year target	0	0	0	0	0
5th year target	0	0	0	0	0
Total number of centers audited for the year	0	0	20	45	57

Total number of surveyor/days used per year

Years	No. of days per year to complete certification schedule	No. of certification teams	No. of surveyors	Total no. of surveyor/days per year
1st	13	1	3	27
2nd	30	3	6	60
3rd	37	4	7	75
4th	45	4	9	89
5th	64	6	13	128

4. Training and development of surveyors

Induction-training programs for new surveyors

> Two-day live-in training in Metro Manila

	1st year	2nd year	3rd year	4th year	5th year
Number of new surveyors	15	15	15	15	0

Continuing education seminars

> One-day seminars in Metro Manila and designated regional venues

> Seminars to be conducted every six months

	1st year	2nd year	3rd year	4th year	5th year
Number of surveyors	0	0	15	15	30

5. Office staff

Administrative activities of office staff	Days / year
Corporate administrative functions	30
Operational management & planning	
Strategic planning	
Financial management	
Quality assurance	
Board meetings	
Development of resource materials	15
Education	
Marketing	
Surveyor training & support	5
Advocacy	10
Personal professional development	5
Total	65

Days available for survey and audit activities		
Net number of days available per year		
Days in a year		365
Less		
Weekends	104	
Public holidays	16	
Vacation	15	
Sickness and other absences	5	
Administrative activities	65	205
Total		160

Survey activities per professional staff

	Range of hours spent	
Booking survey with TB DOTS center	0.50	1.00
TB DOTS center support	1.00	3.00
Manage self-assessment	0.50	1.00
Book surveyors x2	0.50	1.00
Book transport, etc	1.00	1.00
Post survey support	0.25	1.00
Manage post-survey documentation	0.50	1.00
Notify results (PhilHealth & TB DOTS centre)	0.25	0.50
	4.50	9.50
Average time spent per survey		7.00 hours

Audit activities per professional staff	
Average time spent per audit	4 hours

Summary - Number of professional staff to be hired on full-time basis

	1st year	2nd year	3rd year	4th year	5th year
Per professional staff, days available for survey, re-survey and audit activites	160	160	160	160	160
Working hours per day	8	8	8	8	8
Total hours available for survey, re-survey and audit activities	1,280	1,280	1,280	1,280	1,280
Total number of hours required for survey and re-survey activities, per number of centers targeted for the year	140	315	392	469	671
Total number of hours allocated for audit activities	0	0	80	180	227
Grand total number of hours for survey and audit activities	140	315	472	649	898
Equivalent number of professional staff to be hired for the year	0	0	0	1	1

Notes: For the first three years, the equivalent number of professional staff is less than half. It is then rounded up to 0. However, for purposes of staffing it shall be considered as 1. Despite redundancy, 2 professional staff shall be hired.

Number of administrative staff to be hired on a full time basis

> Ratio of 1 administrative staff for every 2 professional staff

Final manpower complement

Years	Professionals	Administrative
1st	2	1
2nd	2	1
3rd	2	1
4th	2	1
5th	2	1

6. Office space requirements

As programmed (in square meters)

Dimension for the certification team	3 x 3
Dimension of the training room	5 x 6
Requirement for the staff	4 square meters per staff
Dimension for the executive	4 x 5

Years	Certification team	Training	Staff area	Executive area	Total area
1st	9	30	12	20	71
2nd	9	30	12	20	71
3rd	9	30	12	20	71
4th	9	30	12	20	71

Office space requirement, as implemented

Area to be leased (in square meters)	100
Rental cost per month (PhP)	350
Monthly rental cost	35,000
Renovation costs per square meter (PhP)	12,000

> All-inclusive costs per square meter based on currently prevailing industry standards.

Total renovation costs	1,200,000

7. Office equipment, 1st year

Particulars	Qtty.	Unit cost	Total costs
Telephone system	1	50,000	50,000
Computers	2	30,000	60,000
Server	1	100,000	100,000
LaserJet printer	2	12,000	24,000
Fax machine	1	7,000	7,000
Photocopier	1	30,000	30,000
Total			271,000

8. Office furniture, 1st year

Particulars	Qtty.	Unit cost	Total costs
Executive area			
Executive table	1	10,000	10,000
Executive chair	1	4,000	4,000
Visitors' chairs	4	3,000	12,000
Back cabinet	1	6,000	6,000
Book cabinet	1	6,000	6,000
Waiting area furniture	1	20,000	20,000
Certification team			
Office tables	1	3,000	3,000
Office chairs	1	2,000	2,000
Clerical tables	1	3,000	3,000
Clerical chairs	1	1,000	1,000
Training area			
Conference table with 12 chairs (set)	1	20,000	20,000
Staff area			
Clerical tables	2	3,000	6,000
Clerical chairs	2	1,000	2,000
Total			95,000

9. Revenues

a. Fee structure per certification, escalation rate (10% per annum

> Based on current economic indicators, inflation rate is below 5%. For purposes however of business modelling, a 10% escalation rate is being used for conservatism and to input the specialized nature of revenues and espenses in the healthcare industry.

Initial certification

Application fee, payable upoon filing of the application for certification	10,000
Survey fee, payable upon designation of the survey team	40,000
Total	50,000

	1st year	2nd year	3rd year	4th year	5th year
Schedule of fees	50,000	55,000	60,500	66,550	73,205

Second and subsequent certifications

Application fee, payable upoon filing of the application for certification		10,000
Survey fee, payable upon designation of the survey team		40,000
Annual audit fee for two years, payable together with survey f	15,000	30,000
Total		80,000

	1st year	2nd year	3rd year	4th year	5th year
Schedule of fees	80,000	88,000	96,800	106,480	117,128

Re-certification for centers who failed in annual audits

Re-survey fee, payable upon designation of the survey team		40,000
Annual audit fee for two years, payable together with survey f	15,000	30,000
Total		70,000

	1st year	2nd year	3rd year	4th year	5th year
Schedule of fees	70,000	77,000	84,700	93,170	102,487

b. Schedule of revenues

	1st year	2nd year	3rd year	4th year	5th year
Initial certification	1,000,000	1,375,000	1,815,000	2,329,250	4,263,459
Second certification	0	1,760,000	2,420,000	3,194,400	4,099,480
Re-certification	0	0	84,700	191,930	265,288
Total	1,000,000	3,135,000	4,319,700	5,715,580	8,628,227

10. Expenses

	1st year	2nd year	3rd year	4th year	5th year
Personnel					
Surveyors					
Rate per surveyor/day	1,000	1,100	1,210	1,331	1,464
Annual cost	26,667	66,000	90,347	119,009	187,070
Staff					
Monthly rate per professional, inclusive of benefits	30,000	33,000	36,300	39,930	43,923
Monthly rate per administrative staff, inclusive of benefits	20,000	22,000	24,200	26,620	29,282
Annual cost					
Professional	720,000	792,000	871,200	958,320	1,054,152
Clerical	240,000	264,000	290,400	319,440	351,384
Training and development					
Training for new surveyors					
Honorarium, at regular rate per surveyor/day	30,000	33,000	36,300	39,930	0
Trainor's fees and expenses, at PhP20,000/day and escalating at 10% per annum	40,000	44,000	48,400	53,240	0
Venue, board and lodging, at PhP5,000/head /day and escalating at 10% per annum	150,000	165,000	181,500	199,650	0

Transportation. at PhP5,000 per head and escalating at 10% per annum	75,000	82,500	90,750	99,825	0
Sub-total	295,000	324,500	356,950	392,645	0
Continuing education seminars					
Honorarium, at regular rate per surveyor/day	0	0	36,300	39,930	87,846
Trainor's fees and expenses at 3 locations, at PhP25,000/day / location and escalating at 10% per annum	150,000	165,000	181,500	199,650	219,618
Venue, at PhP2,000/head and escalating at 10% per annum	0	0	36,300	39,930	87,840
Transportation. at PhP2,000 per head and escalating at 10% per annum	0	0	36,300	39,930	87,840
Sub-total	150,000	165,000	290,400	319,440	483,144
Annual costs	445,000	489,500	647,350	712,085	483,144

Travel and transportation					
Rate per day	2,000	2,200	2,420	2,662	2,928
Annual costs	26,667	66,000	90,347	119,009	187,070
Board and lodging					
Meal allowance per day	200	220	242	266	293
Room rate for the 10% needing overnight stay	2,000	2,200	2,420	2,662	2,928
Annual costs	5,333	13,200	18,069	23,802	37,414
Marketing and promotions					
Budget per center	2,000	2,200	2,420	2,662	2,928
Annual costs	40,000	55,000	72,600	93,170	117,128
Rentals					
Annual costs	420,000	462,000	508,200	559,020	614,922
Supplies and materials					
Budget per center	1,000	1,100	1,210	1,331	1,464
Annual costs	20,000	27,500	36,300	46,585	58,564
Telephone and communication expenses					
Monthly budget	5,000	5,500	6,050	6,655	7,321
Annual costs	60,000	66,000	72,600	79,860	87,846
Insurance, repairs and maintenance					
Monthly budget	5,000	5,500	6,050	6,655	7,321
Annual costs	60,000	66,000	72,600	79,860	87,846
Water and power					
Monthly budget	20,000	22,000	24,200	26,620	29,282
Annual costs	240,000	264,000	290,400	319,440	351,384
Depreciation					
Annual expense	313,200	313,200	313,200	313,200	313,200

APPENDIX K - LIST OF RECOMMENDATIONS

Recommendation 1. The certification standards should be reviewed and updated in a planned way in consultation with the key stakeholders.

Recommendation 2. The TB DOTS center certification program should be 'owned' by a body of stakeholders representative of the broad issues in TB management and control.

Recommendation 3. The certification organization must develop and promulgate a clear and unambiguous mission statement.

Recommendation 4. The certification organization must identify its core values and articulate those values to all stakeholders.

Recommendation 5. The certification organization must develop clearly enunciated goals for the certification organization and the certification process. Continuous quality improvement should be a goal of the certification program.

Recommendation 6. The certification organization must develop and enunciate the ethical principles guiding the organization.

Recommendation 7. Criteria for appointment, duties and responsibilities and term of office should be established for the members of governing body.

Recommendation 8. The governing body should establish appropriate structures and mechanisms for effective governance including systems to evaluate the performance of the governing body.

Recommendation 9. All staff in the certification organization must have a role statement.

Recommendation 10. All staff should be appointed on the basis of clear and unambiguous selection criteria through a transparent and procedurally fair process.

Recommendation 11. The governing body should regularly review the organizational structure to ensure it supports the organization's activities.

Recommendation 12. The governing body must delegate authority to an executive officer and ensure the responsibilities are defined so that the organization is managed effectively.

Recommendation 13. The certification organization must develop a strategic plan and ensure that plan is regularly reviewed in terms of goals and achievements.

Recommendation 14. The certification organization must develop a operational plan and develop systems to measure performance against the operational plan.

Recommendation 15. The certification organization should develop an information pack for prospective TB DOTS centers outlining rights and responsibilities of the TB DOTS center.

Recommendation 16. The certification organization should develop a service contract for the services to be provided.

Recommendation 17. The certification organization should develop a policy and systems for the provision of advice to applicant TB DOTS centers.

Recommendation 18. The survey team should comprise two surveyors chosen for their expertise as TB DOTS center surveyors and not as representatives of a stakeholder organization.

Recommendation 19. Only one consolidated consensus report should be prepared and submitted by the survey team.

Recommendation 20. When the survey team disagrees with the TB DOTS center's self-assessment the survey report must contain comments explaining the rationale or evidence relied upon to make the adverse finding.

Recommendation 21. A new rating system should be introduced based on an even number Likert scale.

Recommendation 22. Each rating should be the consensus of the two surveyors.

Recommendation 23. The certification decision should be based on the collective judgement of the decision-making committee.

Recommendation 24. A team member should be available to provide clarification for the decision-making committee.

Recommendation 25. The decision-making process should be guided by rules to ensure procedural fairness and by guidelines to ensure appropriate and consistent certification decisions.

Recommendation 26. The certification decision should be based on the findings at the time of survey.

Recommendation 27. The duration of subsequent certification should be extended from one year to three years.

Recommendation 28. A range of certification outcomes should be considered, especially for the subsequent certification.

Recommendation 29. The certification organization should establish guidelines for each possible certification outcome to ensure objectivity and consistency in certification decision-making.

Recommendation 30. The certification organization should establish quality control and quality improvement systems to review and evaluate certification decisions for consistency.

Recommendation 31. The certification organization must develop a transparent and procedurally fair appeals process.

Recommendation 32. Certification surveyors should be selected through a transparent selection process based selection criteria founded on the identified skills and competencies required of a good certification surveyor.

Recommendation 33. Certification surveyors should be appointed for fixed terms and renewal of appointment should be based on assessed performance.

Recommendation 34. An induction-training program should be developed based on the ISQua criteria and the program should be routinely evaluated for effectiveness.

Recommendation 35. The certification surveyors be contractors paid an honorarium initially 'pegged' to the Department of Health honorarium rate approved by the Department of Budget and Management for doctors and to the Civil Service Commission honorarium rate for other professionals.

Recommendation 36. An independent certification organization should not be established.

Recommendation 37. A two-stage approach for the certification of private TB DOTS Centers should be considered. PhilCAT should continue to survey the first small group of TB DOTS centers using the key recommendations in this report to strengthen the process.

Recommendation 38. An independent private certification group should be contracted to survey the rest of the targeted total number of private TB DOTS Centers.

Recommendation 39. PhilCAT should continue to focus on its six core goals.

Recommendation 40. PhilCAT should remain accountable for the certification program and continue to own the certification standards. This would require PhilCAT to regularly review and update of the standards.

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